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2+2 SHOULD NEVER EQUAL 3: GETTING INTERCENSAL POPULATION ESTIMATES RIGHT THE FIRST TIME

HEARING

BEFORE THE

SUBCOMMITTEE ON FEDERALISM AND THE CENSUS

OF THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

SEPTEMBER 6, 2006

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2+2 SHOULD NEVER EQUAL 3: GETTING INTERCENSAL POPULATION ESTIMATES RIGHT THE FIRST TIME

WEDNESDAY, SEPTEMBER 6, 2006

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FEDERALISM AND THE CENSUS,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 2 p.m., in room 2247, Rayburn House Office Building, Hon. Michael R. Turner (chairman of the committee) presiding.

Present: Representatives Turner, Norton, Maloney, and Dent.

Staff present: John Cuaderes, staff director; Ursula Wojciechowski, professional staff member; Juliana French, clerk; Jon Heroux, counsel; Peter Neville, fellow; Kimberly Trinca, minority counsel; Mark Stephenson and Adam Bordes, minority professional staff members; and Cecelia Morton, minority office manager.

Mr. TURNER. Good afternoon. A quorum being present, this hearing of the Subcommittee on Federalism and the Census will come to order.

Welcome to the subcommittee's hearing entitled "2+2 Should Never Equal 3: Getting Intercensal Population Estimates Right the First Time." This is the fifth in a series of hearings on Census Bureau programs. Today's hearing will examine the Bureau's intercensal population estimates program.

Intercensal population estimates are vital to the accurate allocation of hundreds of billions of Federal dollars. Unfortunately, intercensal estimates are often inaccurate. As a result, the allocation of these Federal dollars is also often inaccurate.

Washington, DC, for example, has disputed the Bureau's estimates every year since 2002, and has noted in a July 22, 2006 Washington Post article that the Bureau recently acknowledged that they had missed about 6 percent of D.C.'s population.

Cities, counties and States can challenge the Bureau's estimates and have done so 91 times since the 2000 census. However, I am concerned that numerous other local governments may not have the resources or expertise necessary to challenge the estimates or are unaware of the opportunity to challenge. As a result, these governmental units live with what may be inaccurate estimates and inaccurate Federal funding allocations.

During this hearing, we will examine whether the Bureau's methodology results in reasonably accurate estimates and equitable allocation of Federal grants; the importance of accuracy; opportuni-

ties for improving the estimates; whether the Bureau's challenge process is transparent, fair and takes into account a community's ability to challenge; and whether the Bureau strives to continuously improve the estimates.

Before we move on, I would like to recognize Representative Eleanor Holmes Norton of the District of Columbia, who certainly has an interest in this issue. And I yield to her for any comments she may have.

[The prepared statement of Hon. Michael R. Turner follows:]

TOM DAVIS, VIRGINIA
CHAIRMAN

HENRY A. WAXMAN, CALIFORNIA
RANKING MINORITY MEMBER

ONE HUNDRED NINTH CONGRESS

Congress of the United States
House of Representatives

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SUBCOMMITTEE ON FEDERALISM AND THE CENSUS
Congressman Michael R. Turner, Chairman

OVERSIGHT HEARING
STATEMENT BY MICHAEL R. TURNER, CHAIRMAN

Hearing topic: ***2 + 2 Should Never Equal 3: Getting Intercensal Population Estimates Right the First Time.***

Wednesday, September 6, 2006
2:00 PM
2247 Rayburn House Office Building

OPENING STATEMENT

Welcome to the Subcommittee's hearing entitled, *"2 + 2 Should Never Equal 3: Getting Intercensal Population Estimates Right the First Time."* This is the fifth in a series of hearings on Census Bureau programs and will examine the Bureau's intercensal population estimates program.

Intercensal population estimates are vital to the accurate allocation of hundreds of billions of dollars by elected officials and government program managers. Unfortunately, intercensal estimates are often inaccurate. Washington D.C. for example, has disputed the Bureau's estimates every year since 2002 and, as noted in a July 22, 2006 Washington Post article, the Bureau recently acknowledged that they had missed about 6% of the D.C.'s population.

Cities, counties and States can challenge the Bureau's estimates and have done so 91 times since Census 2000. However, I am concerned that numerous others local governments may not have the resources or expertise necessary to challenge the estimates or are unaware of the opportunity to challenge. These governmental units therefore live with what may be inaccurate estimates and thus inaccurate federal funding allocations.

During this hearing, we will examine:

- whether the Bureau's methodology results in reasonably accurate estimates and equitable allocation of federal grants,
- the importance of accuracy,
- opportunities for improving the estimates,
- whether the Bureau's challenge process is transparent, fair, and takes into account a community's ability to challenge, and
- whether the Bureau strives to continuously improve the estimates.

We have several witnesses today to help the Subcommittee examine these issues.

We will hear from the Honorable Charles Louis Kincannon, Director of the U.S. Census Bureau on the first panel.

We will then hear from four witnesses on our second panel today including Dr. David Swanson, Director of the State Data Center of Mississippi and professor at the University of Mississippi. Joining Dr. Swanson are Dr. Joy Phillips, Associate Director of the Washington, DC Data Center and Ken Hodges, Assistant Vice President and Chief Demographer for Claritas Incorporated. Finally we will hear from Dr. Warren Brown, Research Director of the Cornell Institute for Social and Economic Research at Cornell University.

I look forward to the expert testimony of our panelists here today. Thank you for your time and welcome.

####

Ms. NORTON. Thank you, Mr. Chairman. I have only brief comments, beginning with thank you for both inviting the District of Columbia to testify here and for inviting me, although a member of the full committee, not of this subcommittee, to sit with you in this very important hearing. It is always timely, but particularly timely now, because while citizens may not know it, the census of course has to begin preparing full throttle now for the regular census.

Mr. Chairman, your initiative here today may not produce what most of us would like, an immediate increase in the per capita that we receive, because now that you know there are more people, OK, where's the moola. But it is very important that the census not have to essentially wait until 10 years to try to figure it all out, and what is supposed to happen is greater accuracy because they are doing it all along and we want to find out why that has not occurred in so many instances.

Mr. Chairman, if I may say so, we may not get money or any benefit from an intercensal new estimate. But it can do huge harm. Everybody looks at these census figures to see whether, for example, businesses should move here, whether schools are growing or losing population. These figures from the granddaddy of all figures, the Census Bureau, all of us rely upon the Census Bureau and honor the Census Bureau for its work. But to the extent that these intercensal estimates are inaccurate, they can do huge harm to local jurisdictions, which is why you see local jurisdictions rising up in arms, not because they expect any change, immediate change in Federal disbursements, but because they know everybody who has anybody to do with their city in any fashion will look first here.

Now, when people rise up in arms about whether they are losing or gaining population, everybody says, yeah, yeah, yeah, you're never going to agree that you're losing. But we find out that the Census, in its honesty, and that is what you have to congratulate the Census most for, that it is non-partisan, it acts on the figures. The problem we have is perhaps with its methodology. We knew in the District of Columbia that we were one of the hottest cities in the United States. We knew that people were moving into the District, and we had to try to figure out why the Census said we were continuing to lose population at a huge rate.

Who gets hurt, finally, Mr. Chairman? Think about who gets money. Most people in the middle class do not get Federal grants, ultimately. Who depends upon this per capita, and we are basically talking about per capita grants, who depends upon it are the people who get food stamps, people who need Section 8 housing, so the accuracy, particularly since much of the money goes directly to needy recipients, could not be more important.

I thank you and congratulate you on starting us off with a serious look at this issue.

Mr. TURNER. Thank you.

I want to recognize Carolyn Maloney of New York, who just got here. If you'd like, I can read the witnesses that are going to be testifying as you get settled, and then return to you for opening comments.

Mrs. MALONEY. That would be great. Thank you.

Mr. TURNER. On our first panel, we have the Honorable Charles Louis Kincannon, Director of the U.S. Census Bureau. On our second panel we have four witnesses. They are: Dr. David Swanson, director of the State Center of Mississippi and professor at the University of Mississippi; Dr. Joy Phillips, associate director of the Washington, DC Data Center; Mr. Ken Hodges, assistant vice president and chief demographer for Claritas Inc.; and Dr. Warren Brown, research director of the Cornell Institute for social and economic research at Cornell University. We look forward to each of the witnesses and their expert testimony today.

And with that, then, I would like to recognize Carolyn Maloney of New York for her opening statement.

Mrs. MALONEY. I really want to thank the chairman and the ranking member, Ms. Norton, for holding this. First of all, Mr. Chairman, let me say that I am delighted to see so many New Yorkers represented at the hearing today. Warren Brown from Cornell and Ken Hodges from Claritas are but two of the excellent demographers we have in the city of New York. And I am proud that both the State of New York and the city of New York have been at the forefront of the fight for an accurate census.

Absent today is Joe Salvo from the city planning department of New York city. While Dr. Salvo is not in the room today, we cannot discuss census accuracy without recognizing the leadership he and the entire team at the Department of City Planing have demonstrated on this issue. Both Mayor Michael Bloomberg and Giuliani before him have recognized the importance of an accurate count. And the planning department has worked very hard to help ensure it.

The 2000 census would have missed over a quarter of a million people in New York City if the city had not forced the Census Bureau to correct its address list for the city. Since then, the planning department has repeatedly challenged the Census Bureau's estimates for New York City, and won every single challenge. The citizens of New York City are deeply indebted to the hard-working experts at the New York City planning department.

Unfortunately, the issue of the accuracy of census counts and estimates is not new. Following the 1990 census, the Census Bureau made a political decision not to adjust the intercensal population estimates for the net under-count observed in the 1990 census. The 2000 census results proved the folly of that decision.

The GAO reported that the 1999 estimates underestimated the total population of the United States by 6.8 million people. Half of that error would have been eliminated had the Census Bureau corrected these estimates for the observed net under-counted.

The 2000 census which is used as the base for the intercensal estimates since then is equally flawed. We are repeatedly told that the net error in the 2000 census is almost zero. While that statistic may be true, it hides the huge errors in that census. While the Census Bureau has refused to produce estimates of the gross errors in the 2000 census, that is the number of people missed in the census and the number of people counted twice, we know from its own research that the gross error is at least 12 million.

The Census Bureau gets to zero error by letting the people counted twice substitute for those missed. That may work for statistics,

but it does not work for representation. The people counted twice are not like the people missed. They are not the same color, they do not have the same income, and they do not live in the same places. Those errors are built into the estimates for 2001 through 2005.

As I mentioned earlier, New York's 2000 census count is considerably higher than it would have been if the Census Bureau had been left on its own. Instead, the city of New York took advantage of a program mandated by Congress to review and correct the Census Master Address File for the 2000 census. The city identified for the Census Bureau thousands of addresses that were not on the census address list. Addresses not on the address list don't get counted. Making sure those addresses were on the list gave New York City a more accurate count.

The story does not end there, as we will hear from the witnesses today. The Census Bureau estimates are worse in cities like New York, where IRS records do not adequately reflect changes in the city's population. As a result, New York City has repeatedly been forced to challenge the Census Bureau estimates to get a fair count.

However, the fair count for New York City comes at the expense of other cities in the State. While the Census Bureau has repeatedly been forced into cooperating with State and local governments, it has done so reluctantly. GAO reviewed the cooperative effort to correct the census address list prior to the 2000 census and found that effort was weak at best. Plans for a local updating of census addresses for 2010 remains sketchy at best.

Congress was told that the American Community Survey would allow the Census Bureau to produce more accurate population estimates. We repeatedly asked for the details of just how that would be done. But no details were forthcoming.

Congress has invested nearly half a billion dollars in the American Community Survey. I hope the Director's testimony today will tell us how that investment has improved the population estimates. And Mr. Chairman, I am pleased that you are holding this hearing today. The Census Bureau should be held accountable. However, this problem is not new. When the results of the 2000 census were announced in December 2000, one of the startling facts was that the population estimates were seriously flawed. They were flawed 6 years ago, and they were equally flawed today.

Thank you.

Mr. TURNER. I want to thank both Mrs. Maloney and Ms. Norton for their participation today, Ms. Norton for her representation of our Nation's capitol and Carolyn Maloney for her representation of New York City. Both cities that we will see in our testimony that have challenged the estimates, both of which have been undercounted. And the impacts on those communities are something we are trying to address.

With that, I want to proceed with turning to Mr. Kincannon. As everyone is aware, each witness has kindly prepared written testimony which will be included in the record of this hearing. Witnesses will notice that there is a timer light on the witness table. The green light indicates that you should begin your prepared remarks, and the red light indicates that your time has expired. The

yellow light will indicate when you have 1 minute left in which to conclude your remarks.

It is the policy of this committee that all witnesses be sworn in before they testify. So Director Kincannon, will you please rise and raise your right hand.

[Witness sworn.]

Mr. TURNER. Please note that the witness has responded in the affirmative. And Director Kincannon, we will turn to you for your statement.

STATEMENT OF CHARLES LOUIS KINCANNON, DIRECTOR, U.S. CENSUS BUREAU

Mr. KINCANNON. Thank you, Mr. Chairman. Good morning, and on behalf of the U.S. Census Bureau, I want to thank you, Chairman Turner, and the members of the subcommittee for the opportunity to discuss our intercensal estimates program.

Population estimates provide important information for decision-makers at the national, State and local levels, and are essential to many Federal programs and initiatives. They are used to determine program eligibility and to ensure equitable funding for a large number of Federal programs, including Federal transit grants, the Crime Victim Assistance Program, Community Development Block Grant program, medical assistance programs and many others.

The estimates are also used by the Census Bureau to provide population controls for the American Community Survey, which was fully implemented only last year with the support of this committee and the Congress. The American Community Survey replaces the long form of the census with annual relevant information for local communities. It provides vital information that describes how the population is actually changing, not just population decline or growth. It also provides vital information on the occupancy rate, persons per household, international migration and domestic migration, all of which will help improve the estimates program. But this is the first year in which we have had nationwide data covering all of the country that we will be able to use that.

The estimates are produced in cooperation with representatives from each of the States. Each year, we produce more than 39,000 sub-national estimates of total population, including estimates for every State, county and incorporated place or city. We also report measures of the population by age, sex, race and Hispanic origin for the Nation, States and counties.

The population estimates released annually by the Census Bureau are the product of a longstanding, valued partnership with the States. This 40-year old cooperative is alive and thriving today in every State as well as the District of Columbia, and Puerto Rico is a participating member. We work together each year to produce a set of consistently, timely estimates for every State, county and incorporated place.

Local areas also have an opportunity to revise their estimates through a challenge process using one of several established approaches that may require additional data and take into account local information. We provide guidance and assistance to help any local community through that process. Normally, a community contacts us by phone, e-mail or letter to express their concern and re-

quest a challenge package. The local government is invited to provide source material, such as building permits, utility hookups and other data to supports its request for an alternative estimate. If the data support an alternative estimate, we will send an acceptance letter to the local government, notify relevant agencies and post the new estimate on the Census Bureau's Web site. This new estimate becomes the official estimate and we notify the relevant agencies of Government of this change.

Of the 39,400 official population estimates released for 2004, there were only 38 challenges, most of which were accepted. The challenges have been described in the media as Census Bureau mistakes that it has been forced to correct. It's not really that simple. The population estimates are the result of a cooperative effort. We rely on information from other Federal agencies, as well as the States, to produce one set of official estimates intended to serve all customers. If documentation is provided that supports an alternative estimate, the original is revised, not because we didn't get it right the first time, but because working with the States and tracking into account their additional documentation, we can arrive at a more accurate estimate.

As we look to the future, we are re-examining our assumptions, methodologies and source data and discussing these efforts with our partners, especially the States that rely on the estimates for funding allocations. Alaska, California and North Dakota are particularly interested in working with the Census Bureau and have contributed to our research efforts.

During the past 6 months, we have sponsored two research conferences on population estimates, with participants from Federal agencies, State partners and academia. In these conferences we examined how we could better improve the estimates for international migration, current assumptions and methodologies and better meet user needs. Many users believe we should examine new approaches and perhaps embrace alternative or multiple methods. It is important as we proceed to consult with our State partners and data users.

As Members of Congress, you are also an important partner, because your decisions affect what we do and affect every community in America. As we study alternatives, I hope we will have a chance, Mr. Chairman, to brief you in the future.

Thank you very much, and I would be happy to answer any questions.

[The prepared statement of Mr. Kincannon follows:]

PREPARED STATEMENT OF

CHARLES LOUIS KINCANNON

DIRECTOR

U.S. CENSUS BUREAU

"Two Plus Two Should Never Equal Three:

Getting Intercensal Population Estimates Right the First Time"

Before the Subcommittee on Federalism and the Census

U.S. House of Representatives

6 September 2006

Good morning. On behalf of the U.S. Census Bureau, I want to thank Chairman Turner and the members of the Subcommittee for the opportunity to discuss our intercensal estimates of population.

These estimates are produced by the Population Estimates Program, which is part of the Demographic Directorate at the Census Bureau, in cooperation with representatives from each of the states. Each year, we produce more than 39,400 sub-national estimates of total population, including estimates for every state, county, and incorporated place or city, and estimates of the population by age, sex, race, and Hispanic origin for the nation, states, and counties, in accordance with Section 181 of Title 13 of the U.S. Code. According to this section, "during the intervals between each census of population

required under section 141 of this title, the Secretary, to the extent feasible, shall annually produce and publish for each state, county, and local unit of government…current data on total population and population characteristics…." The population estimates provide updates for the intervening years between censuses and are often used for the distribution of federal and state funding.

We produce these estimates by one of two methods. The first, an *administrative records component of population change* or *component method*, is used to produce estimates at the state and county levels. This method accounts for births, deaths, net domestic migration, net international migration, and net movement of the military to and from overseas. For sub-county estimates, we use a *distributive housing unit method*. This method takes into account factors such as residential construction, mobile home shipments, and demolition rates. Subcounty population estimates are then controlled to the county population totals.

History of Population Estimates

The population estimates program has a long history at the Census Bureau. The first population estimates were produced by the agency in the early part of the twentieth century, using simple linear projections based on the previous two censuses of population. By the 1920s, the Census Bureau had developed other methods based on national birth and death registrations and apportioning change since the last census to subnational areas. However, by 1934 the estimates produced using this approach became unreliable and were temporarily discontinued. In 1936, the Census Bureau produced the first series of state estimates that accounted separately for the components of population change, net migration and natural increase. Considerable research was directed to develop sub-national estimates. Several methods were considered, including the use of indicators such as school enrollment, voter registrations, utility

customer lists, and city directories. The foundation for each of these estimates methodologies was the decennial census of population.

With World War II, the nation experienced tremendous population change, and there was an urgent need to produce timely estimates of population to assist in national defense efforts. Also during that period, the United States government implemented a ration program administered by the Office of Price Administration and Civilian Supply. The rationing program provided timely information about the population independent from the census, and the Census Bureau was able to produce fairly reliable estimates for states, counties, and metropolitan areas. After the war, the ration program ended, and that source of information was no longer available. In 1946, the Census Bureau produced a comprehensive report exploring the use of two innovative component methods, demonstrating the potential of using a variety of information to produce estimates at sub-national levels. During the rest of the decade, the agency cooperated with other agencies and researchers, exploring the component method.

In 1953, Henry S. Shryock, Jr., Assistant Chief of the Population and Housing Division, proposed a formal cooperation between the Census Bureau and the states. This report, P-25, No. 81, suggested a greater role for the states in the production of population estimates. According to Shryock, an important purpose of consultation with the states "would be to discuss our present estimate series with the leading customers and get their criticisms." In addition, he suggested the Census Bureau would also be able to obtain better information about local areas.

In 1967, with the creation of the Federal State Cooperative Program for Population Estimates (FSCPE), the Census Bureau established a partnership between the agency and the states. The creation of the FSCPE coincided with the establishment of the

statutory mandate to produce the annual estimates of population and characteristics. The FSCPE organization promotes cooperation and information sharing to produce a set of consistent population estimates for every state, county, and place in the United States.

Population Estimates in Contemporary Times

The population estimates released annually by the Census Bureau are the product of this long-standing, valued partnership with the states. This partnership is alive and thriving today, and every state, as well as the District of Columbia and Puerto Rico, is a participating member. We work together each year to produce a set of consistent, timely estimates for every state, county, and incorporated place—more than 39,000 estimates.

The states supply information such as state and county vital statistics, and information about the location and population of group quarters, including college dormitories, prisons, and other facilities. This information is crucial to updating the population estimates. The Census Bureau obtains other administrative records information from federal agencies, including tax and Medicare records, as well as some vital statistics information. The Census Bureau and the states work together to analyze statistical models that combine the previous census information with the administrative records information to produce current population estimates. After these estimates are created, staff in the Population Estimates Program sends the numbers to the FSCPE representatives for their review.

Counties are a crucial element of the population estimates because they are the primary legal divisions of most states, even though their functions and powers vary from state to state. There are 3,141 counties, or county equivalents, across the United States.

Incorporated places and minor civil divisions are also important. There are more than 36,000 incorporated places and minor civil divisions within the United States.

Figure 1: Population Estimates by Geographies

Geography	Number of Estimates
National	1
States, the District of Columbia, and Puerto Rico	52
Counties and County-Equivalents[1]	3,141
Incorporated Places	19,418
Minor Civil Divisions	16,893
Consolidated Cities	7
Census Regions and Divisions	13

The Census Bureau uses the method known as the *administrative records components of population change* to produce county level estimates. State population estimates are formed by summing all county populations within the state. To obtain an estimate of the household population at the county level, we start with the base populations from the census. We add the estimated number of births, and subtract the estimated number of deaths that occurred in each county during that year. We then add an estimate of the net number of people moving into and out of each county, which includes both net international migration and net domestic migration. We also add an estimate of the net movement of the military to and from overseas. We incorporate changes to the non-household population by including the measurements of the net change in the population living in group quarters, which are supplied by the FSCPE state representatives. The next year's estimate starts with the current estimate as its base, and the process is continued.

[1] County equivalents include legally organized boroughs (also known as census areas) in Alaska, parishes in Louisiana, municipios in Puerto Rico, and the independent cities in Maryland, Missouri, Nevada, and Virginia which are independent of any county organization. The Census Bureau refers to these cities as independent cities and treats them as the equivalent of counties for the purposes of producing estimates.

Figure 2: Administrative Records Components of Population Change

$$P_2 = P_1 + B - D + InternatMig + DomesticMig + Net\ Military\ Movement + Change\ to\ GQ$$

Where:
P_2 = Population estimate
P_1 = Population at most recent census
B = Births during the period since the most recent census
D = Deaths during the period since the most recent census
InternatMig = Net international migration during the period since the most recent census
DomesticMig = Net domestic migration (within U.S.) during the period since the most recent census
Net Military Movement = Net movement of the military to and from overseas
Change to GQ = Net change in the population living in group quarters

This is a straightforward and easily understood methodology that is used to produce a complex range of state and county level estimates, including age, sex, and race, as well as Hispanic origin.

The estimates for sub-county areas—incorporated places and minor civil divisions—rely on the *distributive housing unit method.* This method produces estimates using a two-step process. The first step is to create sub-county housing unit estimates. The second step is to produce sub-county population estimates based on the housing unit estimates. The housing unit estimates are created for sub-county geography by starting with the number of housing units from the previous census (i.e., Census 2000) adding estimates of new units, including new residential construction and mobile home shipments, and subtracting estimated housing unit loss (demolition). The initial sub-county household population estimates are formed by multiplying the housing unit estimates by the occupancy rate for the previous census and persons per household for each area. Then, for each county, the household population estimates are controlled to each county household population estimate from the component method approach used to produce the state and county estimates (as previously described). The estimated group quarters population in each area is added to the household population to obtain the total estimated population.

Figure 3: Distributive Housing Unit Method

$$HU_2 = HU_1 + NC - NM - HL$$

Where:
HU_2 = Number of housing units estimate
HU_1 = Number of housing units at most recent census
NC = Estimated new residential construction during the period since the most recent census
NM = Estimated new residential mobile home shipments during the period since the most recent census
HL = Estimated housing loss (demolition) during the period since the most recent census

Uses

Population estimates provide important information for decision makers at the national state, and local levels and are essential to many federal programs and initiatives. They are used to determine program eligibility and to ensure equitable funding for a large number of federal programs, including the federal transit grants, the Crime Victim Assistance Program, the Medical Assistance Program, the Senior Community Service Employment Program, the Community Development Block Grant Program, and many others.

The Census Bureau also produces special monthly estimates of the population by demographic characteristics for four different populations: the resident population; the resident population plus Armed Forces overseas; the civilian population; and the civilian non-institutional population. The Bureau of Labor Statistics uses the estimates of the civilian non-institutional population as controls for the Current Population Survey. The Current Population Survey is the monthly survey of households that provides comprehensive information about the labor force, including the official rates of employment and unemployment. Other federal statistical agencies, such as the National Center for Health Statistics and the Bureau of Economic Analysis, use population estimates to create important indicators, such as birth rates, age-specific death rates, and per capita personal income.

The estimates are also used by the Census Bureau to provide the population controls for the American Community Survey, which was fully implemented last year with the support of this Congress. The American Community Survey replaces the long form of the decennial census with annual, relevant information for local communities. The American Community Survey provides vital information that describes how the population is actually changing, not just population decline or growth. It also provides valuable information on occupancy rate, persons per household, net international migration and net domestic migration, all of which will help improve the Population Estimates Program.

The Challenge Process

The challenge process affords an opportunity to local areas to develop and prepare an alternate population estimate using one of several established approaches that may require additional data and take into account local information. We provide information to help any local community through the process. Normally, a community contacts us by phone, email, or letter to express their concern and request a Challenge Package. This package includes the Review Guide, which describes the procedures and available alternative estimate methods; the derivation sheet that describes the data sources used to derive the Census Bureau estimate for their community; and worksheets for the local communities to use in preparing an alternative estimate. The local government is invited to provide other source material, such as building permit data, consistent with established methodologies to support its request for an alternative estimate. Staff in the Census Bureau's Population Estimates Program reviews these data and consults with the local community to address large discrepancies and other issues. If the data support an alternative estimate, we send an acceptance letter to the

local government, notify relevant agencies, and post the new estimate on the Census Bureau's website (http://www.census.gov/popest/archives/challenges.html). This new estimate becomes the official estimate.

Over the past years, we have received challenges from local governments throughout the United States. There were 38 challenges to the 2004 estimates out of the 39,400 official population estimates released that year, including Arlington County and Alexandria City in Virginia; several of the counties which comprise New York City (Kings, New York and Queens); Utah County, Utah; and St. Louis, Missouri. Many of the challenges we ultimately accepted were described in the media as Census Bureau "mistakes." It is not that simple. The population estimates are the result of a cooperative effort; we rely on information from other federal agencies, as well as the states to produce the one set of consistent official intercensal estimates of population intended to serve all customers. If documentation is provided that supports an alternative estimate, the original is revised – not because we didn't "get it right the first time," but because, working with the states and taking into account their additional documentation, we can arrive at a more accurate estimate.

Towards the Future

As we look to the future, we are reexamining our assumptions, methodologies, and source data, and discussing these efforts with our partners in the FSCPE, especially the states, which rely on the estimates for funding allocation. Alaska, California, and North Dakota are particularly interested in working with the Census Bureau, and have been especially active with the FSCPE and in the Census Bureau's research efforts. During the past six months, we have sponsored two research conferences, with participants from federal agencies, FSCPE members, and academia. The first examined the issue of immigration, and how the Census Bureau could better improve its estimates of

international immigration. The second conference examined the Census Bureau's current assumptions and methodologies, as well as the different user needs for population estimates.

We are reviewing our assumptions. The earlier consensus that the primary goal was to provide a consistent set of estimates for all users is changing. Many users are expressing the view that we should examine new approaches and perhaps embrace alternative or multiple methods. It is important, as we proceed, to consult with our state partners and data users. As members of Congress, you are also an important partner because your decisions affect every community in America. As we work to study alternatives, I hope that we will have the opportunity to brief you in the future.

Thank you, Mr. Chairman, and I would be happy to answer any questions.

Mr. TURNER. Thank you, Director Kincannon.

In looking at your testimony, there is one part of it that kind of strikes me. In looking at the testimony that is to follow you and in looking at several of the news articles that describe estimates that have been made in estimates as a result of protests from cities, it's clear that some of the issues that cities face, or communities that face that challenge of this data, is that once a challenge has been made, once additional information is provided, it doesn't appear that the Census Bureau adequately reflects that change that has occurred, or the change in methodology that would then reflect more accurate estimates in the future.

And your statement here, knowing that's part of the issue, that it's not just that you didn't get it right the first time, but that it's not right the first time and then people have to repeatedly go back to readdress the issue, your statement here strikes me, because you said "many of the challenges we ultimately accepted were described in the media as Census Bureau mistakes." And it's not that simple, you say.

Well, if the data that you have is wrong and the estimates that you had were ultimately proven to be not accurate, then it would seem that they were mistaken, and if they were mistaken, that would appear to be a mistake. And once that is identified, it would seem that there would be a process by which the Census Bureau would then modify its procedures and processes, so that communities would not have to continually be in a process of coming to the Census Bureau and providing other data to reflect changes in the estimation process.

Could you please describe, once a community objects, provides you that additional data and it is accepted by you, what is done by the Census Bureau to make certain that is adequately reflected in the future?

Mr. KINCANNON. Well, what we can do, and do, if we accept a challenge, based on the evidence submitted by a city, that becomes the new basis for this set of estimates that we have next year. So we don't throw away what they've given us. But new changes, additional housing units, additional developments of some kind, new changes in group quarters, are not any more known to us in the year plus one than they were in the base year.

So we really need the assistance of State and local officials in making sure that the changes that don't show up in the large scale record data, administrative record data, for States and for counties, can be taken into account.

Mr. TURNER. I have a letter that we've received from the North Dakota census committee member, Katherine Strumbeck. And she states in here, "North Dakota has experienced declining annual estimates in 12 of the past 15 years. The first 10 years of declines were later invalidated by Census 2000, which showed we actually experienced significant population gains." Despite proven flaws in the methodology, the 2001 estimates conflicted with the Census 2000 growth by dropping the North Dakota population below the 1990 estimate as if the growth in Census 2000 had not occurred. So there are many individuals and groups, organizations, communities, that believe that current data is not necessarily reflected in those estimates.

Mr. KINCANNON. Well, I explained face to face with Governor Hoeven and with Ms. Strumbeck that the 2001 estimates were not changed to accept the results of the 2000 Census, because the process really takes longer to feed in. They were corrected for the next years and were backward changed for 2001, I believe. Just a matter that between December of 1 year and we don't have, perhaps we should, but we did not have at that time a method of carrying it down to the local level. So that lags by a year in getting incorporated.

Mr. TURNER. OK, I am sorry, I am confused. Because I had thought that you had just said previously that the Census Bureau does, when they get information that conflicts with their annual estimates, modify their estimate process to make sure that you don't have inaccurate estimates.

Mr. KINCANNON. The new census results are incorporated in this estimate process as soon as they can be, which is not 6 months, but I am sorry, for the year following that. The 2002 and the whole set of records is corrected.

I understood you to be speaking of evidence that a city had given to us or a town about new housing units or additional group quarters or other things that we do not measure directly ourselves, and that we do incorporate in the base for the next year's estimate.

Mr. TURNER. But the decennial census, you do not?

Mr. KINCANNON. We do, but it takes more than 6 months to get it incorporated in there.

Mr. TURNER. I see, it's an issue of time.

Mr. KINCANNON. At least it did in 2000. I will not be here in 2010, 2011, to make sure that they are incorporated then, but you and Ms. Norton and Mrs. Maloney probably will be here and can be vigilant and remind the then-director to make sure that preparation is made to take account of that.

Mr. TURNER. When we were putting this hearing together, there was a sense that our staff received from local communities that the process, the ability to object, to challenge, and the time periods for filing a challenge and the technical expertise in able to be order to do that may be something that is not widely understood by local government communities. Can you please explain the census outreach and its ability to work with communities as they find that the numbers don't reflect what is accurate?

Mr. KINCANNON. Well, I believe I am correct in saying that when we transmit estimates for an area to the official representative of that jurisdiction, first at the State level, that we include first of all, they have reviewed and consulted with us about that estimate at the State level, but we still include in the materials that we send to them, and they are also available on our Web site, not too difficult to find, I think, how you can register a challenge or a proposal for new evidence to be considered.

I believe the same thing is true when we publish the other estimates that we make clear that there is a process available if there is local information that we don't have that could improve our estimates. It may be that we need to review those lists and undertake a direct mailing to targeted representatives in each county and in each incorporated place. We do make contacts with representatives of local government at other times, and if we are not reaching ev-

eryone so that they understand this process, I will undertake to do so.

Mr. TURNER. One of the themes that seems constant is the conflict between the component method and the housing unit method for determination of the estimates. Can you please describe that for us and its application?

Mr. KINCANNON. Well, the component method of administrative records is based, as its name applies, on administrative records to the extent possible. It starts with the preceding estimate or census, if that was the last global estimate for the local area. It adds births and deaths from vital statistics that come largely, but not exclusively, from States and are augmented by information from Federal agencies, and are also estimated, because there are time lags that are in the vital statistics process, the way they're carried out in this country, based on local administration of the program.

As an aside, one lag is introducing new racial categories that are standard in the census and have been standard, some of them for 20 years, getting those introduced into particularly birth records at the local level is difficult. That's not the Census Bureau that does that. And it's a difficult problem to deal with it, but it is a concern.

In addition, we make an estimate of internal migration between the States, using tax records. That is not perfect, but it's a very strong representation and was used in past years for very significant allocations of resources when there was a revenue sharing program.

We also make an estimate of net international migration. The administrative records on migration, as you know, are imperfect in a number of ways. This is the most difficult component of our estimate. I am happy to say that with the American Community Survey, directly asking people where they lived 1 year ago, we will have a new and independent, truly independent measure, of where people lived the year before, whether in another State or in another country. That should be a basis for improving our estimates of international migration.

Mr. TURNER. One more followup question, then I am going to turn to Ms. Norton. So knowing though that D.C. and New York, two dynamic urban areas, have both had estimates that have not accurately reflected their populations, what do you believe needs to be done to improve either the methodology or the process that you're undertaking?

Mr. KINCANNON. We have held a couple of conferences talking about the methodology used. And it seems clear that there's more openness now amongst users and our partners in making the estimates to considering whether different methods can be used for different areas. It has been a hallmark of our practice that we need to be consistent and use the same methodology applying to D.C. as to Utah. I could argue that case. But if we can make better estimates overall, modifying the estimates, the methods based on locally available records, we are willing to do that. We would proceed prudently on that basis, but we are open to doing that.

Mr. TURNER. Is that your recommendation, that you believe that should occur?

Mr. KINCANNON. I believe we should examine it thoroughly in cooperation with our partners and with users of the data and of course with the Congress.

Mr. TURNER. Ms. Norton.

Ms. NORTON. Thank you, Mr. Chairman. Just fascinating.

I must say that what you just said about D.C. and Utah, I am glad you used that example, we have a bill on the floor, Mr. Chairman, I wish you would look at, that would give both Utah and D.C. a vote. And each would gain by what they learned, by what their constituents learn and what people who want to do business there learn. So you handed me that plug, sir, no, I'm sorry, our witness handed me that plug.

But therein lies one of the great flaws. I discovered it only, sir, when I asked another agency known for the same professionalism that has surrounded you since you were created by our Constitution. I asked that GAO look at the structural imbalance problem in the District of Columbia. And what they initially came back with was the comparison between the District of Columbia, yes, and the functional equivalent of Utah. And you've got the most skewed results.

So we said, could there be a problem in that there is a uniqueness to a city-state that means that the statistical model has to reflect that. That is hard to do. But you know what? The GAO went back and with a great deal of statistical, use of the statistical science and with fresh eyes about the huge differences between every State and a state-city, they came back with an entirely different result. I just put that on the table, and would invite you to speak with the demographers and others who worked on this very challenging issue and the landmark report they did on the structural imbalance in the District of Columbia. Because I think it points, indeed, I have huge problems with the statistics that say that D.C., for example, which never had any factors of the highest this or that disease rate, well, is that really right? Sometimes you think, well, you compare city to city, but it still doesn't come out right, because it's really not a city.

Anyway, this is fascinating to a non-statistician who still can think analytically and wonder what is going on here. So I am really fascinated by the work you are doing.

Let me just ask you an obvious question. Given what you said to the chairman about even the time lag it takes to correct, you said, well, you can't do it in 6 months, you spoke of a year. Why did it take the District of Columbia 4 years to get an acknowledgement from the Census Bureau that its estimates, which showed us losing large amounts of population, were inaccurate? Why couldn't that have happened earlier? This was not a "lag by a year," as you said earlier in your testimony. This was a lag by at least 4 years. And it did harm to the District of Columbia.

Mr. KINCANNON. First of all, I would like to say I know what you mean that it does harm beyond the distribution of Federal funds. Attracting business, attracting tourists, attracting all kinds of interest and investment in a locality depends on reliable statistics about the population. And to show a shrinking population can send a message that is not consistent with the vitality of the city.

Shortly, well, I am not sure exactly, but some time in my first year after taking office in March 2002, I read a story in the Washington Post where Mayor Williams was critical of the Census Bureau's latest population estimates. And they were words that many a mayor has spoken, some with greater justification than others. So I was interested in this, since I had the new responsibility, and I lived in a city where I and my bosses read that same paper. I asked the estimates folks, had D.C. appealed this or had they supported the claim, what evidence had been submitted. I was told that D.C. had not been participating in the process.

I may have misunderstood that, but my understanding was that D.C. was not participating in the meetings of the Federal-State cooperative program and had not formally challenged.

Ms. NORTON. So although they challenged for 4 years, they really weren't participating in the process? So it is their fault that they didn't get these census updates until 4 years later?

Mr. KINCANNON. Madam, I don't know whose fault it was.

Ms. NORTON. Well, I need to know that, because if it is something that—look, we are not really here to lay blame, but in understanding how the responsibility is allocated. We need to look to the States and localities to do what they are supposed to do, and of course, we look to the Federal Government.

So your testimony seems to be that the District, for 4 years, was not participating, not that it didn't provide the information you needed but were absent, and the mayor was complaining but not having his people participate in the process you required in order to get an update?

Mr. KINCANNON. I asked that our staff work directly with the staff of the Government of the District of Columbia to engage them in the process and to see if there was evidence that would enable us to correct our estimates if justified. And that proved to be beneficial. And we came up with a significant——

Ms. NORTON. And 4 years later, I am just trying to find out what accounted for 4 years.

Mr. KINCANNON. I don't know what accounted for 4 years. I don't know how long it took to get the evidence and how long it took to evaluate it. I will provide you with that information if I can.

Ms. NORTON. I would appreciate it. Because obviously I want to make sure that the District by the next census in fact has accurately submitted its own data. So if I don't know, from your point of view, what happened, then it is going to be hard for me, the Federal official, to say to them, you better make sure you do X, Y and Z. Because they are going to be here later, and I will ask them. But they will give me their version. I need your version of why it took 4 years and your testimony here as of now is that it is their fault.

Now, just let me ask you this. If you don't challenge, since they did challenge for 4 years, is there any way to assure corrections will be made at all? Here are the big cities who, after all, will find the wherewithal. So suppose you are a small or mid-level city. And you say, we know that is wrong, but when we look at our budget, geez, to get the experts that can go up against a Census Bureau, boy, those are expensive, even if we get them from our State university. So they say, well, we just hope they get it right the next time.

How are we to sense the purpose of the intercensal estimates is to assure that by the time you get to the annual census, it will virtually all be right? What happens to the great majority of jurisdictions who do not have the wherewithal, whatever that might be, to challenge what they think are incorrect census figures?

Mr. KINCANNON. Well, first of all, I would not wish to characterize the District of Columbia as being at fault in this. The practice of participation, to the best of my knowledge, had fallen into disuse. And we revived that use, there were new staff members, as I understand it, in the District of Columbia. And when they engaged in that process, we learned a great deal from it, and were able to make improved population estimates.

I am pleased at that. I don't know if I may be misinformed or I certainly don't know how the situation came to pass that there was not active participation. But there was no reason for their not to be active participation, since we are all living in the same metropolitan area, and we can reach out particularly to the D.C. Government and ensure that you are cooperating with us.

Ms. NORTON. We wouldn't even have to pay transportation to get our folks here. So I am really concerned about those of you who live a few miles away.

Let me move on.

Mr. KINCANNON. I did want to say, you asked about smaller cities, but 60 percent of our challenges came from cities with population, under 50,000 population.

Ms. NORTON. Say that again?

Mr. KINCANNON. Sixty percent of our challenges came from cities with a population of 50,000 or less. So cities about a size are able to organize their records about housing starts and about utility connections and new construction and school records or tax records, and make a case to us. They know a lot about their local data that we don't know and can't know. So smaller cities are managing to do that.

Ms. NORTON. Well, it should be a collaborative process. But it sounds like the functional equivalent of get yourself a lawyer, file a challenge and if he is good enough, he may prevail.

I was looking at page 9 of your testimony. In any vastly important enterprise like the Census, you are going to find the Congress looking for who is ultimately accountable, and you are going to find Chairman Turner going home and saying to his constituents in the Dayton area what they are going to have to do. But ultimately, we have to find some objective source to indicate who is responsible. The Census is known for its objectivity, at least when it comes to accounting.

But I noted on page 9 that you indicated, and I certainly accept this, that you have to rely on information from other Federal agencies. Fine. So of course, if you do census, I am sure if I came to you with some data, you wouldn't say, thank you, Eleanor, let me see if I can incorporate this. I am sure you use the Census expertise to get it, so OK, they provided it, I want you to run down who those agencies are and tell me what you do about them. And then you say, if the documentation is provided that supports an alternative estimate, the original revised, not because we didn't do it right here, is what the chairman referred to the first time, but be-

cause, and here is the operative language, working with the States and taking into account their additional documentation, we can arrive at a more accurate estimate.

So from that I get, who got it wrong were the Federal agencies who didn't always provide you with the best information. That's No. 1. And No. 2, States who had not submitted the additional documentation, but now that they have, we can arrive at a more accurate estimate. Who is coordinating this process so that up front, without challenges, the legendary Census Bureau can assure that in fact the data provided by the States is accurate, is responsibility to lay nowhere ultimately in this system? Or if it is everybody's job then it is nobody's job and nobody needs to feel responsible.

Is there anybody over this process? Is that the Census Bureau or does Congress need to make clear, clearer than the Constitution, clearer than the additional statutes, that accuracy lies someplace and should we then spell out who it is?

Mr. KINCANNON. If the Congress wishes to make the Census Bureau and not local governments accountable for detailed knowledge about local construction, utility connections, school enrollment and the other, tax return filings and things like that, then I think this Congress would have to support some kind of a census county agent program with staffing in each locality to look at that.

Ms. NORTON. So you don't, even with all your vaunted expertise, you do not regard yourself as the ultimate arbiter of the accuracy of the information you receive and how it is used?

Mr. KINCANNON. No, ma'am. We do regard ourselves as the arbiter of information we receive. But if we don't receive it, we stand with the estimates we are able to make from——

Ms. NORTON. We are going around in circles. You do receive it, you don't accept it, you go 4 years when it comes to the District of Columbia before any changes is made.

Mr. KINCANNON. Well, let's see what the records show.

Ms. NORTON. If you are going to tell me, don't think I am not going to ask the District of Columbia, you mean 4 years you just refused to submit data, even though you were screaming that you weren't receiving—it just doesn't make any sense. As long as there is a Federal agency charged by the Congress of the United States with doing an accurate census that can affect everything about your economy, you are going to find the Congress laying blame with the agency it funds. Now, that agency better find a way, since it is getting our funding, not the States, not the localities, to make sure that its peer agencies give it the right information and that it gets the right information elsewhere. But you cannot rely on Congress to say it is a shared responsibility, because there is nothing we can do about it. Every Member of Congress is affected by what we are discussing here today.

Let me go on to another question.

Mr. TURNER. I do have some additional questions, I will get back to you for a second round if this is an appropriate time.

Ms. NORTON. I have had my 10 minutes, OK.

Mr. TURNER. I will ask a couple of questions, then we will go back to Ms. Norton. I don't want to limit the substance of her questions. But she is on a topic that I also wanted to jump in on. And first off, let me say that in the interest of time, I have questions

about the Master Address File and the TIGER enhancements and the ACS and how it might be able to be used and/or is impacted negatively by this process. And also questions concerning the funding that the Bureau has received to improve its estimates of migration and immigration that I will submit for written responses.

Following on Ms. Norton's theme of the task that you have in front of you, I have two things that I want to highlight and then I will turn it to you. One of which is, out of all the examples we got, this one is the one that was the most striking to me. We got a letter from Sugar City, Idaho. Pretty small town. And this is the letter that we received. It says, "I have been asked to write this letter concerning the city's need to challenge the Census Bureau's 2004 intercensal population estimate. In the year 2000, the population of Sugar City was 1,242. In 2004, the population estimate was 765. After challenging the population, it was at 1,448. If we had left the estimate in 2004, the city would have only received 53 percent of its various State funds," so basically 47 percent of the overall population of this town was missed. And clearly, this is a town that is not going to have the resources that D.C. has.

I wondered if the Census Bureau either does have or should have a trip wire, if you will, in instances where the decennial census has a number that shows a significant increase or the intercensal estimates have been decreasing that trip wire would cause an expedited review of the next estimate. And in this instance where the estimate would appear that 47 percent of the population of this small town was no longer there that the Census Bureau would take an affirmative step, not just the step of waiting for challenges, but an affirmative step of saying, wait a minute, this isn't 5 or 10 percent of a place that has large numbers, but this is a large percentage of a population that suddenly has gone missing. And then perhaps we should work in partnership with those communities. That's the first one.

The second one is, to acknowledge that it is my understanding, and you can correct me if I am wrong, that you do over 39,000 estimates with a staff of about 76 and that the Bureau has new management in charge of population estimates. What I would like to do is if you could tell us about the new management team that is in place, what Bureau changes might be occurring in the population estimates area, and have you considered reorganizing the population division or the estimates branches, and if you could comment on the enormity of the task that you have with the resources that you have.

Mr. KINCANNON. Well, the first question, should we have a trip wire for very small cities with large changes, like Sugar City, I will take a look at that and see. I am not familiar with the Sugar City case. It does appear that Sugar City mustered the resources to challenge it and we accepted that challenge.

I guess we have a lot of more or less self-enforcing features in our form of Government, and that depends on both the willingness of people to obey certain structures and their vigilance in terms of their self-interest. And even very small towns are even quite vigilant and effective in asserting their self-interest.

Mr. TURNER. Right, but their success, of course, can't be considered as proof that therefore the system works. Because there are

a number of communities who either, by the fact that we don't have their data, it doesn't mean that they have the expertise and merely desired not to proceed. It is an example of a community that clearly had small resources and had a significant miss in the estimate.

So I wouldn't say that the fact that they did go through the process shows blanketly across the country that every community therefore has the ability to do it. But it clearly shows that some communities have a significant miss. And my question is, shouldn't that cause something in the Census Bureau light bulb department to go off and say, perhaps this is something where we should be in greater partnership with the community?

Mr. KINCANNON. As I said, we will take a look at the trip wire notion and see if it is applicable in a way that we could achieve it within our current resources. Congress has not been un-generous with its resources on this program, but at the same time, to assertively acquire or demand certain information from each and every city and town, all 39,400 units, is a very big workload and is a burden on those bodies as respondents.

Maybe you are suggesting we could survey those with a certain percentage decline or a certain percentage increase. Although we have never had a challenge about an estimate being higher than expected, we would have to be vigilant on the other side, I suppose, of that, if we had a trip wire.

But we can take a look at that. I don't believe, myself, that we should mount a new data collection program from State and local governments in that regard. But if the Congress thinks we should, then we will take a look at it.

Mr. TURNER. Since you are aware, as I indicated, that there is a new team in place for the population estimates on the management side, is there a reorganization that is anticipated, or do you not see changes occurring in that division?

Mr. KINCANNON. I think what I believe will occur and hope will occur is a thorough reexamination of the methods used in collaboration with academic experts, with our partners in the Federal-State program and with users to see if there is a better way of changing the methodology to produce better estimates. And that I hope to have occurring in the new future. So we are going to take a good look at it.

I don't anticipate ex ante a reorganization of staff or that sort of thing. We will see what methods may need to be changed, and then if organizational changes make sense, that would go forward.

Mr. TURNER. Ms. Norton.

Ms. NORTON. Thank you, Mr. Chairman. I appreciate your indulgence. I have only two more questions.

One has to do with a change that is so clear and obvious, resulting in such huge miscalculations and over-payment of some jurisdictions and under-payment of others that—challenge is not what this is about. This is about changes in our country regarding incarceration, where because so much of incarceration is now outsourced and therefore private prisons are used, or State prisons are used from one part of the country to the other, some of the most astounding, perhaps the most astounding figures I have seen have

come from a paper. I teach a seminar at Georgetown where I'm still a tenured professor.

And a student did a paper on the way in which the census counts inmates. It was astounding. It was much worse than anything we have discussed here today. What it means is that there are rural counties in the United States that are barely populated which offer no services, which have the imported prison population counted in their numbers. And so though it will be easy, especially for the census to figure out a way of finding where these inmates come from, instead it uses a kind of blanket, easy for the census to do. But taking real funds from where they are needed to say, county X, you now have X more people than you thought you had, because we count those people as residing there. Of course, they don't get any services. But somehow their population is increased.

Is that true, and would you explain that, how the census deals with inmates and with the changes in incarceration in our country?

Mr. KINCANNON. We deal with prison and jail inmates as we deal with residents generally in the community. That is, we count them as we have for every census in the place where they usually reside most of the time.

Ms. NORTON. And they reside while they are in prison all of the time where they are incarcerated.

Mr. KINCANNON. Yes.

Ms. NORTON. You see, this is my problem with the census. If I have any problem with the census, it is my skepticism about whether the census moves with the times and has updated its processes to reflect what is happening in our country. Now, would you not say, sir, that it defies the intent of Congress that there would be small counties that could register a 300 or 400 percent increase in population to then have funds distributed that could not possibly go to the prison population as they do not? And to have other places under-counted?

I would almost rather have a neutral way of doing it than to have funds to go where there are no people or very few people. And what the student's paper revealed was astonishing to me, because it was not what the District and New York have been complaining about, which is, let's sit down and figure this out. It was like in your face, anybody knows that this small county, which is essentially going out of business, and that is why they have a prison in the first place, it doesn't have any population. And the census says, that is all right, that is the way we have been doing it since 1700 and I will be darned if we are going to change.

Don't we depend upon you to figure out how to keep taxpayers' money for food stamps, for Section 8 housing, from not going where there are people but where there are prisoners who can't possibly under law take advantage of those Federal funds? Can't you do something about that?

Mr. KINCANNON. I hope that the Congress does not depend upon the Census Bureau to ensure that there is not mis-allocation of program money. The Congress establishes the rules——

Ms. NORTON. It is not program money. This is done on a per capita basis.

Mr. KINCANNON. Well, Congress still establishes those rules. And if it doesn't want the census numbers to include certain portions of them, it can so do.

Ms. NORTON. Sir, this was thoroughly researched. This student got a very good mark. This was a matter of your regulations. The Congress leaves to you these matters. You are the expert agency. I am going to ask you if you would at least promise me this. Because this kind of gross, palpable overpayment of money that could be used for food stamps and for other necessities to jurisdictions where there is not population cannot possibly have been the intent of Congress. You are not arguing that is the intent of Congress, are you?

Mr. KINCANNON. I am arguing that the Congress established the rules for funding and how they incorporate——

Ms. NORTON. No, sir, we——

Mr. KINCANNON [continuing]. Statistics of one order or another——

Ms. NORTON. No, sir, this was researched, there was nothing in the record to show that Congress had established this. These were regulations of the Census Bureau. That is why I am putting the question to you.

Mr. TURNER. Ms. Norton, perhaps since we are going to leave the record open and give the Director opportunity to answer written questions, perhaps this is one that would be a great topic to provide additional data, and in a written question allow him to answer.

Ms. NORTON. Thank you very much, Mr. Chairman. I don't want to go on with this, because I mean, the figures are clear. If he wants to indicate that there are some changes in law that we should try to get, I would do that. But I would ask you to look into the regulations themselves, and if you would not mind getting back to me your basis for continuing these huge overpayments, resulting of course in underpayments elsewhere. I am aware that sometimes it is more difficult to find, or you can argue that, where the prisoner really was from.

But you can designate, just like you designate that prisoner is from some place 1,000 miles away, you designate that. Because it happens to be there and because your regulations say, not the statute, say in the place where you spend most of your time, the Congress hasn't said that, so I'm asking you as a regulatory matter to look into that, get back to me with your sense of why you continue to do that, whether you think legislation is necessary.

Finally, Mr. Chairman, I do want to say that on the District of Columbia, and I am going to ask them to provide me with what they submitted, they are going to have testimony here that talks about an under-count of 572,000 for 2000, a reported population count of 572,000 some in 2000. Then showing decreases in 2005, they are going to talk about this beginning in 1990. What they are discussing is the actual count in 2000 shows a population of 572,059 with a difference of 53,000 people. When you consider we are talking about a city with not 600,000 people in it, you can see the very serious concern we have.

I do promise you this, that I am going to do whatever it takes to get the District to do what it must do if you will promise that

you will make sure that you do what you need to do. When the District tells me for example that one of the things you weren't doing was counting charter schools, all you have to do is read the Washington Post to know that we have the largest number of charter schools per capita in the country and that they are 15 percent. I mean, your folks reading the newspapers could have gotten that one. But they reported a drop in public school population because they ignored what was happening in charter schools.

That is what I mean by professionalism. We expect the Census Bureau to be able to find those kinds of facts out, before it issues estimates. Yes, sir.

Mr. TURNER. And that can be a great segue into our moving into the second panel, if that is OK with you.

Mr. Kincannon, do you have anything you would like to give us as a concluding remark, knowing of course that you are going to be receiving additional questions in writing from us, and we do greatly appreciate your time.

Mr. KINCANNON. I will only say, in reference to Ms. Norton, that we did do a report about counting prisoners at the request of the Appropriations Subcommittee. And I will include that in my response. Thank you.

Mr. TURNER. Thank you very much.

We will then turn to the second panel, if they would please come forward. Thank you, Director Kincannon.

We would like to welcome our second panel, which includes Dr. David Swanson, director of the State Data Center of Mississippi; Dr. Joy E. Phillips, associate director of Washington, DC Data Center; Mr. Ken Hodges, assistant vice president and chief demographer, Claritas Inc.; and Dr. Warren A. Brown, research director, Cornell Institute for social and economic research, Cornell University.

We do have a policy that all the witnesses be sworn in. Before I proceed with the oath, I want to confirm that on your table there is the witness timing light that will give you the green light for you to proceed. Yellow means that you will have 1 minute to conclude your remarks and red is to ask that you kindly conclude your remarks as we move forward then to the next witness or to the question portion of the hearing.

Since it is our policy that we do swear in our witnesses, I would ask that you please rise and raise your right hands.

[Witnesses sworn.]

Mr. TURNER. Please let the record show that all witnesses have responded in the affirmative. Mr. Swanson, we will begin with you.

STATEMENTS OF DAVID A. SWANSON, PROFESSOR OF SOCIOLOGY, DIRECTOR OF THE CENTER FOR POPULATION STUDIES, CHAIR OF THE DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY, UNIVERSITY OF MISSISSIPPI; JOY E. PHILLIPS, PH.D, ASSOCIATE DIRECTOR, STATE DATA CENTER, DISTRICT OF COLUMBIA OFFICE OF PLANNING; KEN HODGES, CHIEF DEMOGRAPHER, CLARITAS INC.; AND WARREN A. BROWN, SENIOR RESEARCH ASSOCIATE, DIRECTOR, PROGRAM ON APPLIED DEMOGRAPHICS, RESEARCH DIRECTOR, NEW YORK CENSUS RESEARCH DATA CENTER, CORNELL INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH, CORNELL UNIVERSITY

STATEMENT OF DAVID A. SWANSON

Mr. SWANSON. Mr. Chairman Turner and honorable Members of Congress, my name is David A. Swanson. My Ph.D is in sociology with a concentration in population studies. I do research in the field of applied demography and teach at the University of Mississippi where I am a professor of sociology and also serve as the chair of the sociology and anthropology departments and director for the Center for Population Studies.

I have been involved in applied demography more than 30 years. My time as an applied demographer includes nearly 4 years with the Population Enrollment and Economic Studies Division with the Washington State Office of Financial Management, where I learned the basics of the craft of applied demography by doing city and county local censuses, developing city, county, municipal and special area estimates and generating population forecasts.

Drawing on my experience, I am pleased to provide my observations on the Census Bureau's estimation program. My testimony covers three areas: first, the major challenge faced by the Census Bureau in providing timely, accurate and cost-effective estimates; second, a suggestion for dealing with this challenge; and third, the issues presented by my suggestion that need to be resolved.

First, the major challenge. Fueled by the proliferation of Federal programs distributing benefits using decennial census data, and the knowledge that Federal courts were now willing to consider apportionment cases, several lawsuits were filed against the Census Bureau following the 1970 census, a practice that itself has proliferated over the past 30 years and now threatens to move into other areas of the Census Bureau's work, such as the annual estimates program.

The reason for much of this conflict is clear. Hundreds of billions of Federal dollars are allocated each decade to States and local governments using census counts and intercensal estimates, and these funds are allocated in a zero sum fashion. The situation will lead to even more litigation and other forms of conflicts as the States, cities and counties struggle to get their populations counted in the decennial census and estimated during the intercensal periods.

This atmosphere of conflict is, I believe, the major challenge facing the Census Bureau's decennial census and intercensal estimates programs. Within the Census Bureau, it not only serves to foster a "defensive" working environment, but also takes important resources away from production and research activities. As the de-

fensive climate within the Bureau hardens, States and local governments feel even more frustration in their attempts to work cooperatively with the Bureau, and often turn to more confrontational forms of communication. This is particularly attractive for local governments in States lacking strong demographic centers.

Second, my suggestion. Breaking with the past, the Census Bureau decided to retain and update its Master Address File, the MAF, for the 2000 census. The MAF is a critical resource for the American Community Survey and its retention facilitates the planning and conduct of an accurate and cost-effective 2010 census.

Importantly, the continuously updated MAF also represents an untapped resource for intercensal estimates and leads directly to the potential to have timely, accurate and cost-effective estimates done using a method that is not only simple to apply and explain, but one that offers the potential for a meaningful role for States and local governments to play in the development of this estimates. What is this method? It is the well-known housing unit method. To be successful, however, this approach needs a nationwide system of State demographic centers that participate in a meaningful partnership with the Census Bureau.

Third, issues that need to be resolved. Turning now to the obstacles associated with my proposal for population estimates based on the MAF and a set of strong State demographic centers, I will begin with the issue of confidentiality. I believe this problem is not insurmountable in regard to my proposal. The National Research Council has issued recommendations to reconcile access and confidentiality. The Census Bureau itself has appointed a chief privacy officer and worked to put effective procedures in place regarding this reconciliation.

Another important obstacle is the financial cost of developing a national system of State demographic centers, such that each State center functions according to accepted standards. States need to shoulder a share of these costs. After all, it is to their benefit to have high quality State demographic centers. As such, I propose that a funding mechanism involving Federal-State matching funds be considered.

What about accuracy? Can the proposed MAF-based population estimation system provide accurate data? In a recent report, the GAO identified MAF/TIGER problems that needed to be solved in order to have a good census in 2010. The first problem is to resolve the address issues such as duplication, omission, deletion, incorrect locations in the MAF, and second, implementing GPS-based geocoding of housing units. These same two problems represent sources of error in the proposed MAF-based system for population estimates. Consequently, if the Census Bureau solves these problems, in regard to the 2010 census, it will do much in regard to the accuracy of the proposed MAF-based population estimation system.

Given the experience gained by the Census Bureau in regard to MAF/TIGER and widespread knowledge and use of the housing unit method, and the capabilities of the best State demographic centers, Alaska, California, Florida, Texas and Washington, for example, I believe that the timeliness and accuracy of MAF-based population estimates based on a comprehensive system of State demographic centers, functioning at the level of the best State demo-

graphic centers, would be sufficient for purposes of resource allocation, research, decisionmaking and planning for the national, State and local levels. I believe it would also prove to be cost-effective and equitable.

I note that the conflict-free system used in Finland to produce annual population data has the type of State and national participation and cooperation that I propose. I believe that this arrangement goes a long ways toward keeping the Finnish system of producing annual population data both equitable and conflict-free, even though, as in the case in the United States, these data are used to distribute funds and other resources to regional and local governments in a zero sum fashion.

With the exception of confidentiality, all the challenges facing the development of a national MAF-based population estimation system are in the form of cost, technical problems or a combination of both. The major technical tasks in building and maintaining a MAF-based population estimation system come down to two areas: address data collection and updates. The feasible way to effect a solution to these problems is to enhance the Federal-State cooperative programs already a part of the Census Bureau activities such that local entities are compensated for helping to maintain the system. There are data collection activities in the United States that already follow this model, vital registration systems, for one.

In conclusion, what I am proposing is that the Master Address File be more fully exploited by using the housing method as a universal means of population estimation for all areas of geography, and that State demographic centers be developed to uniform level of capability, so that States and local governments play a integral part in this system. I suggest that this proposal be supported by State-Federal matching funds. This would lead not only to timely, accurate and cost-effective intercensal estimates, but also to less conflict, greater equity and there would be a uniformly higher level of demographic human capital in the country. It also would be of great use in developing information about the extent of large scale natural disasters, such as Hurricane Katrina.

Thank you, I would be happy to answer any questions from members of the subcommittee.

[The prepared statement of Mr. Swanson follows:]

Statement of

David A. Swanson
Professor of Sociology
Director of the Center for Population Studies
Chair of the Department of Sociology & Anthropology
University of Mississippi

before the
Subcommittee on Federalism and the Census
Oversight Hearing
Committee on Government Reform
U.S. House of Representatives

Hearing Topic: "Two Plus Two Should Never Equal Three:
Getting Intercensal Population Estimates Right the First Time."
Wednesday, 6 September 2006
Room 2247 Rayburn House Office Building

Introduction

Mr. Chairman Turner and honorable members of Congress, my name is David A Swanson. My Ph.D. is in sociology with a concentration in population studies. I do research in the area of applied demography and teach at the University of Mississippi, where I am a professor of sociology and also serve as the chair of the Sociology & Anthropology Department and as the Director of the Center for Population Studies. I have been involved in applied demography for more than 30 years. During that time I have not only learned much about the Census Bureau, its procedures, dedicated and highly-skilled people, and products, but also about the practice of applied demography.

My time as an applied demographer includes nearly four years with the Population, Enrollment, and Economic Studies Division of the Washington State Office of Financial Management, where between 1976 and 1980 I learned the basics of the craft of applied demography by doing city and county local censuses, developing state, county, municipal, and special area estimates and generating population forecasts. While working in Washington State, I had the privilege of seeing how one of the country's best state demographic centers worked. I gained an appreciation of its usefulness to the state, its governmental units, its private sector, and its residents. I also gained a deep appreciation not only for the importance of technical, administrative and "people" skills to the operation of a first class center, but also of the critical role played by the political process in developing the laws and administrative regulations required to build and maintain such an operation in an environment of continuous quality improvement.

In addition to my time in Washington State, I also have three years of service as the Alaska State Demographer, three years as service as the Arkansas State Demographer, and over ten years of service as a Consulting Senior Scientist for Science Applications International Corporation during the site characterization phase of the Yucca Mountain

High Level Nuclear Waste Repository north of Las Vegas, Nevada. I have organized and supervised many special censuses, developed annual population estimates, and done population and school enrollment forecasts. My work in applied demography spans several countries, nine states, 100s of counties and cities, and numerous special areas such as transportation planning areas and school districts.

Observations on the Census Bureau's Estimation Program

Drawing on my experience, I am pleased to provide my observations on the Census Bureau's estimation program.

My testimony covers three areas: (1) the major challenge faced by the Census Bureau in providing timely, accurate, and cost-effective estimates; (2) A suggestion for dealing with this challenge; and (3) Issues presented by my suggestion that need to be resolved. I conclude my presentation with a summary.

Before I start I note that many of my observations come from papers I provided to the subcommittee staff.

1. The Major Challenge Faced by the Census Bureau in Providing Timely, Accurate, and Cost-effective Estimates

Fueled by the proliferation of federal programs distributing benefits using decennial census data and the knowledge that federal courts were now willing to consider apportionment cases, several lawsuits were filed against the Census Bureau following the 1970 census, a practice that has proliferated over the past thirty years and now threatens to move into other areas of the Census Bureau's work such as the annual estimates program. The reason for much of this conflict is clear: Billions of federal dollars are allocated each decade to states and local governments using census counts and inter-censal estimates and these funds are allocated in a "zero-sum" fashion. This situation will lead to even more litigation and other forms of conflict as the states, cities, and counties struggle to get their "populations" counted in the decennial censuses and estimated during the inter-censal periods.

This atmosphere of conflict is the major challenge facing the Census Bureau's decennial census and inter-censal estimates programs. Within the Census Bureau it not only serves to foster a "defensive" working environment, but also takes important resources away from production and research activities. As the defensive climate within the Bureau hardens, states and local governments feel even more frustration in their attempts to work cooperatively with the Bureau and turn to more confrontational forms of communication. This is particularly attractive for the local governments in states lacking strong demographic centers.

2. A Suggestion for dealing with the Challenges Facing the Census Bureau

Breaking with the past, the Census Bureau decided to retain and update its Master Address File – the MAF - for the 2000 Census. The MAF is a critical resource for the American Community Survey and its retention facilitates the planning and conduct of an

accurate and cost-effective 2010 census. The continuously updated MAF and the related TIGER improvements are a fundamental element of success for an accurate 2010 census. Importantly, the continuously updated MAF also represents an untapped resource for inter-censal estimates. It leads directly to the potential to have timely, accurate, and cost-effective estimates done using a method that is not only simple to apply and explain, but one that offers the potential for a meaningful role for states and local governments to play in the development of these estimates. What is this method? The well-known Housing Unit Method (HUM). To be successful, however, this system needs a nationwide system of state demographic centers that participates in a meaningful partnership with the Census Bureau. The state demographic centers, in turn, would need an active and meaningful partnership with the local governments within their respective states.

MAF-based population estimates would contribute toward having more timely, comprehensive, and internally consistent demographic and housing data for the U. S. as a whole and its sub-areas. In regard to geography, I note that MAF- based data are extremely flexible in that they can be geo-coded to a specific location (as opposed to being assigned to an area defined by administrative or statistical boundaries). This also means that the MAF-based system can be overlaid with other features using GIS capabilities. The TIGER street address file comes to mind first in this regard.

This approach to inter-censal population estimation would lead to an entirely new way of looking at the concept of a "small area," in that boundaries could be drawn that are much finer than those allowed by the census defined block. This would allow much higher precision in defining areas for purposes of marketing, site location. Once up and running, this would also allow for greater ease in producing a consistent time series for areas in which administrative boundaries changed over time. The estimates would also provide population controls for the American Community Survey.

3. Issues that need to be resolved.

Turning now to the obstacles associated with my proposal for population estimates based on the MAF, I begin with the issue of confidentiality. The issue of confidentiality is not an insignificant problem. However, I believe that this problem is not insurmountable in regard to my proposal for a MAF-based population estimation system. The National Research Council has issued recommendations to reconcile access and confidentiality and the Census Bureau itself has appointed a Chief Privacy Officer and worked to put effective procedures in place regarding this reconciliation. Thus, I believe that the Census Bureau is capable of creating a national MAF-based population estimation system that meets confidentiality concerns.

Another important obstacle is the financial cost of developing a national system of state demographic centers such that each state center functions according to accepted standards. States need to shoulder a share of these costs. After all, it is to their benefit to have high quality state demographic centers. As such, I propose that a funding mechanism involving federal-state matching funds be considered.

What about accuracy? Can the proposed MAF-based population estimation system provide accurate data? In a recent report, the GAO identified MAF/TIGER problems that needed to be solved in order to have a good census in 2010. These problems include: (1)

resolving address related issues such as duplication, omission, deletion, and incorrect locations in the MAF; and (2) implementing GPS-based geo-coding of housing units. These same two problems represent sources of error in the proposed MAF-based system. Consequently, if the Census Bureau solves these problems in regard to the 2010 census, it will do much in regard to the accuracy of the proposed MAF-based population estimation system.

There are other problems already known to Census Bureau staff and others in regard to using the Housing Unit Method of population estimation that would affect the accuracy of a MAF-based population estimation system, such as tracking new housing units, converted housing units, and deleted housing units. One important problem worth mentioning here involves seasonal populations and seasonal housing. In areas with substantial seasonal changes in population, great care must be taken to get an estimate of the de jure (census-defined) population. Since the implementation of the ACS, this problem is compounded. This is because of differences between the ACS and the decennial census in regard to what constitutes the de jure population. As such, an accurate MAF-based population estimation system will need to deal with the seasonal housing issue and the differences in the definition of the de jure population found in the ACS and the decennial census.

Given the experience being gained by Census Bureau in regard to the MAF/TIGER system, the widespread knowledge use of the Housing Unit Method, and the capabilities of the best of the State Demographic Centers – Alaska, California, Florida, Texas, and Washington, for example, I believe that the timeliness and accuracy of MAF-based population estimates based on a comprehensive system of state demographic centers functioning at the level of the best state demographic centers would be sufficient for purposes of resource allocation, research, decision-making, and planning for the national, state and local levels. I believe that it would also prove to be cost-effective and equitable. I also note that the conflict-free system used in Finland to produce annual population data has the type of state-national participation and cooperation that I propose. I believe that this arrangement goes a long way toward keeping the Finnish system of producing annual population data both equitable and conflict free even though, as is the case in the United States, these data are used to distribute funds and other resources to regional and local governments in a zero-sum fashion.

With the exception of the issues of confidentiality, all of the challenges facing the development of a national MAF-based population estimation system are in the form of costs, technical problems, or a combination of both. The major technical tasks in building and maintaining a MAF-based estimation system come down to two areas - address data collection and MAF/TIGER update. The feasible way to effect a solution to these problems is to enhance the federal-state-local cooperative programs already part of Census Bureau activities such that local entities are compensated for helping to maintain the system. There are data collection activities in the United States that already follow this model, such as the vital registration system.

Conclusion

In conclusion, what I am proposing is that the Master Address File be more fully exploited by using the Housing Unit Method as a universal means of population estimation for all areas of geography, administrative and statistical, and that state demographic centers be developed to a uniform level of capability. I suggest that this proposal be supported by state-federal matching funds as full-fledged partners in this system. This would lead not only to timely, accurate and cost-effective inter-censal population estimates, but also to greater equity in that there would be a uniformly higher level of demographic human capital in the country.

Thank you. I would be happy to answer any questions from members of the subcommittee.

Mr. TURNER. Thank you. For the rest of the individuals, I would ask that you do try to keep it within the 5-minutes allocated. We do have your written testimony, which we have had the opportunity to review. And the reason I am asking is so that we can get to the opportunity for asking questions, which of course we expect that you would have the opportunity to embellish your answers perhaps with some of the text that you are unable to present in your testimony. But we do have it in writing and it will be part of the complete record.

Dr. Phillips.

STATEMENT OF JOY E. PHILLIPS

Ms. PHILLIPS. Good afternoon, Chairman Turner, Representative Norton, members of the subcommittee and all in attendance. My name is Joy Phillips. I am the Associate Director of the State Data Center with the District of Columbia's Office of Planning.

Thank you for the opportunity to be part of this hearing. I am here to testify about the District of Columbia's experience with the U.S. Census Bureau and its use pertaining to the intercensal population estimates.

My remarks will address the following areas: the challenge process, challenge problems, impact of underestimation and recommendations for improved estimates.

The challenge process. The intercensal population estimates and its related products released by the Census Bureau each year are undoubtedly invaluable pieces of data for various levels of government, businesses and of course the public. For the District of Columbia, the release by the Census Bureau of each intercensal population estimate since 2001 brought much concern. Mayor Williams was concerned; so too were other District officials, managers and members of the general public. In summary, the thinking was that the census got it all wrong.

Published reports show that over the past 5 years, Washington, D.C. has emerged as the strongest and most resilient economy in the country, with over $13 billion worth of projects completed since 2001, and $7 billion more under construction. In essence, the District is in a state of economic renaissance with commercial and residential construction appearing in almost every neighborhood.

Against this backdrop, after the Census reported a population count of 572,000 in 2000, it continued to report population decreases of approximately 4,000 persons each year, down to 550,000 in 2005. The pattern was similar to the 1990's. The District government was not about to sit silently by for another 10 years and experience, among other things, an erosion of Federal funding due to incorrect population numbers. With approval from the Mayor, the District of Columbia Office of Planning decided to challenge the census 2005 population estimates by using the housing unit method. Building permits and demolition data from 1999 through 2005 were collected and analyzed thoroughly. Our calculations resulted in a population estimate of 577,900 persons for 2005, some 27,000 persons more than the Census estimated.

To supplement this information, we also submitted information on residential utility connections, school enrollment, individual tax filers, all pointing to either stability or increasing of the population,

and not a decrease to the magnitude suggested by the Bureau. By now, everyone knows that we were successful in our bid to revise these estimates.

However, our successful challenge was not without problems. Among our many problems in preparing for the challenge were lack of information sharing and labor intensiveness. On lack of information sharing, the gist of it was that the Census Bureau did not agree to share their list of group quarter entities with us at the State Data Center. We were quite surprised, given our signed agreements as partners to, among other things, collect and disseminate population related data.

The Bureau invoked the agreements of Title 13, forbidding them to share the list of group quarter statistics they used in the 2000 census count. Thus, the additional 7,000 persons in group quarters in 2005 over 2000 were not included in the Census Bureau revision of the estimates.

The labor intensiveness problem involved the amount of resources used up in legwork, new agreements, manipulating systems not built for retrieval of the data needed, and convincing external agency managers of the critical nature of our data needs and so on.

The impact of underestimation. The impact of underestimating the population in any given area goes beyond the importance of fair representation of residents in Federal and State legislatures. There is also a fiscal impact that is quite challenging to quantify. To date, we have not identified any national data that exists on the fiscal impact of population underestimation on States, cities or local governments. However, drawing from an analysis of information obtained from a survey of 34 cities, and data gathered from various grants awarded to the District of Columbia from 2000 through 2006, some conclusions could be derived on the fiscal impact of population underestimates. Using either scenario, and being extremely conservative, the District of Columbia seems to have lost at least $5 million of direct funding over the period. And this does not take into consideration possible funding loss through competitive grants which may turn out to be quite substantial.

The impact of under-estimation in the District is of particular concern since it affects resources available to our children. According to the Census Bureau, the District lost almost 19,000 children between 2000 and 2005, and underestimating of children means that a significant number of kids that need assistance are not even included in the data used to distribute public funds. City governments must therefore maintain educational and social service programs to serve these children in the absence of financial support from Federal agencies.

How can the Census Bureau improve on the reporting of our population estimates? Our recommendations are for more direct communication between the Census Bureau and the entities that collect and maintain key data items used in the tabulation of population estimates. Second, an approach using a compilation of population component method and the housing unit method.

In closing, we urge the Congress to support a more accurate population estimate by committing the necessary support and funding

now and in the future to the Census Bureau. The benefits of accurate population counts and estimates are clear.

Thank you.

[The prepared statement of Ms. Phillips follows:]

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF PLANNING

Testimony of

Joy Phillips, PhD.
Associate Director, State Data Center
District of Columbia Office of Planning

before the
Subcommittee on Federalism and the Census

Hearing Topic: *"Two Plus Two Should Never Equal Three: Getting Intercensal Population Estimates Right the First Time"*

September 6, 2006 at 2:00 p.m.
Room 2247 Rayburn House Office Building

801 North Capitol Street, N.E., Suite 4000, Washington, D.C. 20002 (202) 442-7600, fax (202) 442-7638

TESTIMONY BEFORE THE CONGRESSIONAL SUBCOMMITTEE ON FEDERALISM AND THE CENSUS

SEPTEMBER 6, 2006

Intercensal Population Estimates for the District of Columbia

Good afternoon Chairman Turner and the members of the subcommittee. My name is Joy Phillips. I am the Associate Director of the State Data Center with the District of Columbia's Office of Planning. Thank you for the opportunity to be part of the hearing on "Two plus two should never equal three: Getting intercensal population estimates right the first time." I am here to testify about the District of Columbia's experience with the US Census Bureau on issues pertaining to the intercensal population estimates. My remarks will address the following areas: the challenge process; the challenge problems; impact of underestimation; and recommendations for improved estimates.

District of Columbia 2005 Challenge Process

The intercensal population estimates and its related products released by the Census Bureau each year are undoubtedly invaluable pieces of data for various levels of government, businesses, non-profit organizations and the public. Population estimates are relied on for program planning, survey controls, denominators for various indicators, and allocation of federal dollars. The accuracy of the population estimates is therefore of utmost importance given its many areas of use and its possible far reaching impact.

The release by the Census Bureau of each intercensal population estimate since 2001 brought added concern from Mayor Williams, other District of Columbia officials, managers, planners, researchers and the general public that something was totally wrong with the numbers. Information published by the Washington, DC Economic Partnership showed that over the past 5 years, Washington DC has emerged as the strongest and most resilient economy in the country, from office and residential real estate markets, to hospitality/tourism and educational institutions. Washington DC is said to have a development dynamic that is best illustrated by $13 billion worth of projects completed since 2001, and $7 billion currently under construction. In essence, the District of Columbia is in a state of economic renaissance with commercial and residential construction appearing in almost every neighborhood. Against this backdrop, after the Census reported a population count of 572,059 for 2000, it continued to report population decreases of approximately 4,000 persons each year, down to 550,521 in 2005. The pattern was similar to the 1990s, where after a count of 606,900 in 1990, the 1999 estimate by the Census was 519,000. But the actual count in 2000 showed a population of 572,059, a difference of 53,000 people. The District government was not about to sit silently by for another 10 years and experience among other things, an erosion of federal funding due to incorrect population numbers. More so, the numbers pointed to a loss of our children between the ages of 5-13 years (13.5 percent drop) and 15-19 years (28 percent drop) between 2000 and 2005.

The District of Columbia Office of Planning, State Data Center, with the approval of the Mayor, contacted the Census Bureau for an explanation of the declining population. The Census responded with an explanation of the methodology and an invitation for a forum with open discussion on population estimates. This invitation was accepted and the session was conducted at the Metropolitan Washington Council of Governments (MWCOG) meeting room in 2005. A

presentation was made by the Census Bureau to the MWCOG forecasting committee consisting of representatives from member counties in the Washington Metropolitan area: some of which were also displeased with their census estimates.

This meeting, however, did not temper the concerns of the District of Columbia representatives. Shortly thereafter the decision was made to challenge the Census estimates. The Census Bureau was informed that the District was preparing to file a challenge and requested the necessary procedures and documents to fulfill this activity. After the release of the 2005 population estimates in December 2005, the District was ready to act. The 2005 population estimate for the District of Columbia (550,521), as published by the Census Bureau, was significantly lower than the DC Office of Planning estimate (577,899), and could not be reconciled with various activities including net new residential construction, residential utility connections, school enrollment, and individual tax filers data for the city. In accordance with the Census Bureau's Review Guide for Local Population Estimates, the District prepared and submitted a population estimate based on the Housing Unit Method as an alternative to the estimate of the Census Bureau.

Housing Unit Method

Net Residential Construction

Building permits and demolition data from 1999 through 2005 were collected and analyzed thoroughly. Records were examined for accuracy using a series of steps including coding consistency, duplicates identification and removal, and address to SSL matching (square, suffix, and lot). In cases of missing data, housing unit counts were verified from other development information such as special development approvals, tax records, Geographic Information Systems (GIS) tools, and aerial photography from 1999, 2003 and 2005. The data showed that

there were 8,101 new residential units completed between April 1999 and November 2004, and 2,179 residential units demolished between April 2000 and June 2005, resulting in 5,922 net new residential units added to the housing stock in the District of Columbia (Tables 1 & 2).

Table 1: Residential Construction by Unit Type (April 1999 and November 2004)

Unit Type	1999	2000	2001	2002	2003	2004	1999-2004
Single Units	413	191	126	415	104	212	1,461
Muti-Units	252	729	1,432	1,438	1,684	1,105	6,640
Total Units	**665**	**920**	**1,558**	**1,853**	**1,788**	**1,317**	**8,101**

Source: District of Columbia Office of Planning
Note: Reporting period was selected based on the Census Bureau's requirements.

Table 2: Residential Demolition by Unit Type (April 2000 and June 2005)

Unit Type	2000	2001	2002	2003	2004	2005	2000-2005
Single Units	77	100	51	28	31	44	331
Muti-Units	556	277	88	563	346	18	1,848
Total Units	**633**	**377**	**139**	**591**	**377**	**62**	**2,179**

Source: District of Columbia Office of Planning
Note: Reporting period was selected based on the Census Bureau's requirements.

Given Census 2000 data as a base, the number of housing units in 2005 was 280,605. Assuming an occupancy rate of 0.90356 (Census 2000) gives a total of 253,543 occupied housing units. Applying a household size of 2.11 (Table 3), the 2005 estimate of persons in households plus the group quarters population of 42,923, brings the total to 577,899 persons. In summary, the District of Columbia's population estimate for 2005 is 27,378 persons (5 percent) more than the Census Bureau's estimate of 550,521 persons.

Table 3: Average Household Size

	2000 (Census)	2001	2002	2003	2004	2005
Overall Average	2.16035	2.16	2.15	2.14	2.13	2.11

Source: District of Columbia Office of Planning

Supplemental Information

Although the following was not required for the housing unit method, the decision was made to submit the additional information to supplement the building permits information and further validate the District's population estimate.

Residential Utility Connections

Residential utility connections data were obtained from utility companies serving the District of Columbia's residents. The data from the Potomac Electric Power Company (PEPCO) was utilized for the purpose of the challenge. As shown in Table 4, there was a general increase in the number of residential units served between 2000 and 2005, an increase from 264,948 to 269,509, respectively. This resulted in a net addition of 4,561 residential customer units.

Table 4: Number of Active Residential Electricity Utility Connections

	Individual Meters	Master Meters	Units on Master Meters	Total Units
April 1, 2000	194,147	1,388	70,801	264,948
July 1, 2001	194,925	1,311	70,351	265,276
July 1, 2002	196,052	1,296	68,892	264,944
July 1, 2003	198,228	1,247	67,972	266,200
July 1, 2004	200,850	1,234	66,379	267,229
July 1, 2005	203,561	1,200	65,948	269,509

Source: Potomac Electric Power Company (PEPCO)

School Enrollment

Over the past five years, school enrollment options in the District of Columbia have become more diverse. Data obtained from the DC State Education Office showed the traditional District of Columbia Public School (DCPS) enrollment levels declining from 68,015 students in the 2001-2002 school year, to 61,710 students in the 2004/2005 school year (a decrease of 6,305

students). On the other hand, the Charter Schools under the umbrella of the Board of Education Charters and the Public School Board show enrollment at 10,651 students in 2001/2002 and increasing to 15,163 students in 2004/2005 (an increase of 4,512 students). These data suggest that the majority of District's children missing from traditional DCPS transferred to one or the other type of charter schools. Comparative data for home-schooled students was unavailable for the same time period. However, data obtained from the Association of Independent Schools of Greater Washington (AISGW) for private schools in the District of Columbia that are members of the association showed a slight increase from10,998 in 2003-2004 to 11,207 in 2005-2006. District of Columbia Public Schools, Office of Federal Grants Programs, list FY 2005 nonpublic schools enrollment for DC residents at 5,762 in 2005 and 5,915 in FY 2006. In addition, the National Center for Education Statistics (NCES), which conducts bi-annual surveys of all schools, listed private school enrollment numbers in the District of Columbia at 16,690 in 1999/2000 and 16,376 in 2003/2004. In essence, the children of the District of Columbia residents remain in our schools and in our city in 2005 just as they were in 2000. The major change was the movement of some students to charter schools. Thus, the numbers published by the Census which showed the District losing children between the ages of 5-13 years (8,070 or 13.5 percent drop) and 15-19 years (10,668 or 28 percent drop) between 2000 and 2005 are contradicted by the enrollment data for DCPS, charter schools, and private schools.

Tax Filers

The method used to calculate the District's population estimate involves taking the 2000 census population as the base, adding births, subtracting deaths, and estimating international and domestic migration. Domestic migration is measured through comparisons of income tax returns from two years, counting the number of returns (and dependents) living in the District both years, moving into the District, and moving out of the District. This calculation, as performed by the Census Bureau, yields a large net out-migration rate – i.e., more people moving out than moving in. The problem with this methodology is that using matched income tax returns looks only at households and people who file tax returns in both years. Those who file only in one year, or not at all, are not part of the process. This distorts the migration rate, because people who don't file tax returns - in some instances, because they have no taxable income – are less likely to move out of the District than people who do file tax returns (conclusion supported by researchers like Patricia Becker in her work on "Differential Migration as a Factor in Population Estimate Methodology," ASA 1990; and Donald E. Starsinic in "Development of Population Estimates for Revenue Sharing Areas," Bureau of the Census Report, 1974). In fact, if there were a drastic decline in the number of tax filers with dependents, this would have been reflected in the total school enrollment. As stated above, enrollment numbers for the combined DCPS and Charter Schools do not support a drastic decline in the population. Further, data obtained from the DC Office of Tax and Revenue showed the number of individual tax filers at 297,250 in 2004, down slightly from 298,365 in 2000, a 0.4 percent decrease.

Challenge Problems

There were mainly two problems encountered in the preparation of the challenge. These were:

- Lack of information sharing
- Labor intensiveness

Lack of Information Sharing

The ability to update the group quarters population numbers so that they are directly comparable to the 2000 group quarters data required two critical pieces of information. One was the sharing of the same list of group quarter entities as used by the Census Bureau in 2000 with the State Data Center. The other was the same or exact understanding of the definition of group quarters by the State Data Center as the Census Bureau. Upon request to the Census Bureau to share this list of group quarter entities, the Bureau invoked the agreements of Title 13 forbidding them to share the list of group quarters statistics they used in the 2000 census count. In the absence of this list, the State Data Center had no choice but to resort to its own understanding of the definition of group quarters. Subsequently, the data submitted for 2005 to the Bureau was rejected on the grounds of not being directly comparable. Thus, the additional 7,000 persons in group quarters in 2005 (42,923) over 2000 (35,600) were not included in the Census Bureau's revision of the estimates.

Labor Intensiveness

The information required for the various challenge options, did not reside at the DC State Data Center (the office that partners on a daily basis with the Census Bureau), a common problem in many states and cities. Therefore, gathering the necessary data for the challenge demanded much legwork, new agreements, manipulating systems not built for retrieval of the data needed, and convincing external agency managers of the critical nature of our data needs. This challenge

process for the Office of Planning took hundreds of hours of manpower sorting through files that had already been archived, records that lacked some critical information, records that were duplicates, and in some cases, records that just did not exist. At the end of the day, a combination of methods, including aerial photography, actual site visits, interviews with ward planners, and statistical analyses produced results that we were confident of.

Impact of Underestimation

The impact of underestimating the population in any area goes beyond the importance of fair representation of residence in federal and state legislatures. The decennial and intercensal population estimates are the basis for the distribution of funds for various programs, such as health, housing, community and economic development, transportation, job training, and low income energy assistance. While it is understood that funding formulas are very complex, and provides different amounts of funding for different groups of people, it is unquestionable that there is a fiscal impact to states, counties and cities whose population are underestimated. To date, we have not identified any national data that exist on the fiscal impact of population underestimates on states, cities, or local governments. However, drawing from an analysis of information obtained from a survey of 34 cities, and data gathered from various grants awarded to the District of Columbia from 2000 through 2006, some conclusions could be derived on the fiscal impact of population underestimates.

In an effort to estimate the impact of the 1990 undercount on cities, and to estimate the likely impact of similar inaccuracies in the 2000 census, 34 cities were surveyed and findings reported in a document entitled 'The Fiscal Impact of the Census Undercount on Cities A 34-City Survey,' which was prepared and published by the Conference of Mayors in January 1999.

Cities were asked to report on federal and state funds they had lost over the last decade due to the 1990 census undercount – both total dollars and per person dollars lost. Total loses in federal and state funds in all 34 cities amounted to $536 million. The average amount lost to the cities during the 1990s averaged $1,230 for each person (or $123 per person each year) not counted in the city.

In the absence of any specific data on per person dollars loss for the District of Columbia, if the above conclusions are applied, then the city would have lost about $738,000 of direct federal funds each year since 2001, and 3.7 million dollars over the 5 year period from 2001-2005, without taking inflation into consideration. (Adjustments from the newly approved 2005 population estimate of 582,049 resulted in an additional 31,700 persons over the Census Bureau's previous estimate of 550,341. This gives an average of 6,342 persons underestimated each year. At a rate of $123 per person, 6,342 persons translates into $738,000 of federal funds lost each year and 3.7 million over the 5 year from 2001 through 2005).

The second area of analysis employed was to identify each of the grants awarded by the federal government to the District of Columbia between October 2000 and July 2006 that had population based formulas in their determination. This task, given the short turn around period required, yielded a total of 145 grants that were awarded based on population formulas. The funds awarded totaled over $477 million dollars. If the assumption is made that 5 percent of this total was lost through the underestimation of the population, then the district would have lost over $23 million dollars. If a more conservative assumption is made by using 1 percent as the total lost, that results in about $5 million dollars.

The impact of underestimation in the District is of particular concern since it affects resources available to our children. According to the Census Bureau, the District loss 13.5 percent (8,070) of its 5-13 year olds, and 28.2 percent (10,668) of its 15-19 year olds between 2000 and 2005. An underestimation of children means that a significant number of kids that need assistance are not even included in the data used to distribute public funds. City governments must therefore maintain educational and social services programs to serve these children in the absence of financial support from federal agencies. Children are approximately 50 percent of Medicaid recipients. Federal programs like foster care, Women Infants and Children (WIC), special education and the Child Care and Development Block grant are all focused on children. The fiscal impact of the underestimation is especially noticeable in cities like the District of Columbia where social problems are severe.

Underestimations also affect private sector decisions. Inaccurate data leads businesses, private foundations and nonprofit organizations to make misguided decisions about where to focus resources or may even lead to missed business opportunities.

In addition to direct fiscal impacts there are also indirect impacts as well. Among them are the effects on grants that consider population either in share numbers or as denominators for rates. For instance, the District of Columbia came close to loosing its annual $20 million allocation for its declining teen age pregnancy rate due to the reported drop in the number of teenage population by the Census Bureau. There are also competitive grants where increased documented need based on census data can increase a jurisdictions ability to obtain the grants. Further, statistical sampling can be distorted from the use of incorrect population data.

How can the Census Bureau improve on the reporting of our population estimates?

Our recommendations are for:

- More direct communication between the Census Bureau and the entities that collect and maintain key data items used in the tabulation of population estimates. There should be a trigger in cases where there is a dramatic increase or decrease in the population trend from previous year(s). This trigger should initiate a request for explanatory information at the state, county, or city level.
- An approach utilizing a combination of the population components method and the housing unit method, or the housing unit method used as a check on the population components method. While the population component method employs vital events (births and deaths) and net migration to produce population estimates, there is always room for administrative error in either of these subcomponents. The additional use of the housing unit method, whether building permits, certificates of occupancy, or utility connections will help to highlight any irregularities that may have occurred from the population component method. Thus, the housing unit method can be used as a quality control on the population component method.

In closing, we urge the Congress to support a more accurate population estimate by committing the necessary support and funding now and in the future to the Census Bureau. The benefits of accurate population counts and estimates are clear, and both the public and private sectors benefit when data are both current and accurate.

Thank you. I would be happy to answer any questions from members of the subcommittee.

Mr. TURNER. Thank you, Ms. Phillips.
Mr. Hodges.

STATEMENT OF KEN HODGES

Mr. HODGES. Thank you. I am a demographer with a company that provides demographic information to businesses. For 24 years, I have produced population estimates and been a user of the Census Bureau's estimates.

Businesses are big users of demographic data, and they require estimates for very small geographic areas, such as census block groups. Census Bureau does not estimate population for block groups, so we do that in the private sector.

Error can be high for block group estimates. It is about 15 percent on average. But it often drops to less than 5 percent with aggregation to larger areas, such as a trade area around a store or a service area for a telecommunications provider. The reduction of error based on aggregation depends on the accuracy of estimates for larger areas, such as counties and cities. At these levels, most private suppliers defer to the Census Bureau's estimates, which are produced with resources not available to us.

So businesses have a sizable stake in the accuracy of the Census Bureau's population estimates. The consequences of error are difficult to quantify, but with things like commercial development and media measurement involved, large numbers of dollars and even jobs can be at stake.

Revisions to some estimates are a reminder that they do involve error. Some recent revisions have been large enough to raise questions about the Census Bureau's estimates program. The Census Bureau is aware of these concerns and recently held a conference where external experts recommended flexibility in the use of new data and methods and collaboration with local experts. The Census Bureau is receptive to these recommendations and motivated to improve its program.

Currently, error is addressed through the challenge process, in which a revised estimate can be issued for government units that provide sufficient evidence of documentation for revision. But while revisions can suggest how large estimation error can be, one cannot judge the entire estimates program based on a few high profile revisions.

Most users have a rather narrow perspective on the Census Bureau's estimates. For example, local governments focus on a single estimate, and if they dispute that one number, the estimates program is a problem in their view, and very understandably so. The challenge process responds to these concerns of local governments, but can give the impression of an estimates program that is in serious trouble.

In my work, we use the Census Bureau's estimates for all cities, counties and towns and we use them every year. From this broader perspective, the estimates have actually served us very well. For example, they are the starting point for our own county estimates, where back in 1990, we had an average error of about 4.1 percent. By 2000, that error was down to about 3.4 percent. I would love to take all the credit for that improvement in accuracy, but most

of it goes to the improvement in the Census Bureau estimates that we are using as input.

The continued existence of problem estimates, though, points to the need for further improvements. We do need to go beyond just the improvements achieved through revisions based on challenges. Governments do not challenge to get a lower population estimate. All 89 revisions identified now in the Census Bureau's Web site are increases over the original estimate. So the revisions that we have just now only correct for one type of error and certainly not all of those.

And because the Census Bureau estimates all areas nationwide, they face a zero sum constraint and cannot simply add population based on local data and input. The Census Bureau's estimates have to sum to a realistic national total for U.S. population and therefore have to correct for estimates that are too low and for estimates that are too high.

To conclude, some promising resources and new methods are being proposed. The Census Bureau is determined to move forward with its program. But users need to maintain realistic expectations. Even with improved accuracy, the Census Bureau's population estimates will still be estimates and subject to error. The frequency of challenges and the magnitude of revisions may be reduced, but some areas will still dispute their population estimates, and there will be continued pressure for revisions. This is the imperfect nature of population estimates, and from that broader perspective, those imperfect estimates will be of continued value to many business applications.

Thank you very much for the opportunity to testify, and I look forward to your questions.

[The prepared statement of Mr. Hodges follows:]

Statement of

Ken Hodges
Chief Demographer
Claritas Inc.

before the
Subcommittee on Federalism and the Census
Committee on Government Reform
U.S. House of Representatives

September 6, 2006

I am a demographer with Claritas Inc., a company that provides demographic information products to a wide range business clients. For 24 years, I have produced population estimates for business applications, and have been a regular user of the Census Bureau's population estimates. I am pleased to provide my perspectives on the Census Bureau's estimates, and their importance to the business sector.

Businesses are heavy users of demographic information because the demand for products and services is strongly related to the size and characteristics of an area's population. Because businesses need to assess demand for specific products in specific areas, they need demographic estimates for small geographic units.

In response to this demand, private sector suppliers produce annual estimates for small areas such as census tracts and block groups. Tracts and block groups are neighborhood level geographic units for which census statistics are reported. Nationwide, there are about 65,000 census tracts, subdivided into approximately 208,000 block groups. The Census Bureau does not estimate population for these small statistical geographies, and some demographers regard such estimates as beyond the state of the art of applied demography.

However, businesses derive value from these estimates because most aggregate them to larger areas relevant to specific business applications – such as the trade area for a new store, ZIP Codes, or the area served by a telecommunications provider. Error can be high for individual block group estimates, but accuracy improves significantly as they are combined to form larger areas. Mean error for individual block group estimates is in the 15 percent range, but for aggregate areas, error often drops to well below five percent.

The reduction of error through aggregation depends on the accuracy of estimates for larger areas such as cities and counties. And accuracy at these levels depends on the accuracy of the Census Bureau estimates. The private suppliers focus their efforts on small area estimates, but rely on Census Bureau estimates for counties, cities and towns – based on data resources not available outside the government.

By forcing their small area estimates to sum to Census-based "control totals," the private suppliers ensure that their positive and negative estimation errors offset to totals consistent with the estimates published by the Census Bureau. Thus, the private sector estimates become more accurate with aggregation to the extent that the Census Bureau estimates are accurate.

Businesses have a sizable stake in the accuracy of population estimates, as they contribute to applications including retail site location, real estate development, and media audience measurement. Estimation error has potentially very real consequences for these businesses and the communities they serve. The consequences vary widely, and are difficult to quantify, but can relate to whether a community is selected for a business location, and the success or failure of a new business location. Major business decisions are not usually based solely on population size, but population estimates are a critical factor, and large numbers of dollars and jobs are at stake.

Businesses also are becoming major users of information from the new American Community Survey (ACS). And with ACS data being weighted by the Census Bureau's county population estimates, the accuracy of these estimates is becoming of even greater importance to business users.

Revisions to Census Bureau population estimates are a reminder that estimates involve error and uncertainty. Some recent revisions have been large, and raise questions about the Census Bureau's estimates program. All population estimates programs have room for improvement, but there is a sense among many users that the Census Bureau has exhausted the potential of its current methods, and that the program needs to be moved forward.

The Census Bureau is aware of the present limitations, and held a conference in July – soliciting suggestions from external experts on how the estimates program could be improved. There was agreement that the Census Bureau's approach may be overly constrained by a one-size-fits-all approach, and recommendations urged greater flexibility in the use of new data resources, different methods for different areas, and collaboration with local demographers. The Census Bureau is receptive to such suggestions, and motivated to make improvements.

It was noted at the conference that the Census Bureau already transcends these constraints on an ad hoc basis in the estimates challenge program. Local governments can challenge the Census Bureau population estimate for their area, and if they can document an alternative population size, the Census Bureau will issue a revised population estimate for that government unit.

But while these revisions likely improve the accuracy of the estimates for the government units in question, one cannot judge the Census Bureau's estimates program based on a few high profile revisions. In fact, some aspects of the challenge and revision process illustrate why the Census Bureau needs to be careful in improving its estimates program.

Most users of the Census Bureau's population estimates focus on only a few areas. For example, state demographers focus on the counties in their state, and local governments focus on a single estimate. If they dispute that one number, the estimates program is a problem in their view. The present system of challenges and revisions responds to this perspective, but can give the impression of an estimates program in serious trouble.

In my work we use the Census Bureau estimates for all counties, cities and towns, and we use them every year. From this broader perspective, the Census Bureau's population estimates have served us very well. The Census Bureau has its own measures of estimation accuracy, but we confirm this value through evaluations of our own county population estimates, which are based on those from the Census Bureau (typically, we project the Census Bureau estimates ahead another year or two for our products). For example, the county population estimates we produced for in 1990 had a mean error of 4.1 percent relative to the 1990 census counts. By 2000, mean error was down to 3.4 percent. I would love to take credit for this improvement, but it traces to the Census Bureau estimates from which our numbers were produced. So if anything, the overall accuracy of the Census Bureau's population estimates has improved over time.

Still, problem estimates point to the need for further improvement, and the question is how best to achieve it. Businesses tend to have the broad perspective, and thus an interest in improvements beyond those achieved in response to challenges initiated by a few local governments.

When the Census Bureau revises an estimate in response to a challenge, the focus is narrow, as a government need only demonstrate that its population is higher than the original estimate. They need not demonstrate that the estimates for other areas should be lower. And governments do not challenge to get a lower population estimate. Of 89 post-2000 revisions currently listed on the Census Bureau's website, all 89 are an increase over the original estimate. So, while local data and expertise are a basis for improving estimation accuracy, the Census Bureau cannot simply defer to state and local input. Demographers have long suspected that if all government units produced their own estimates, the implied total U.S. population would be unrealistically high – perhaps by a large margin.

Because the Census Bureau estimates all counties, cities and towns nationwide, the estimates must sum to a realistic total for U.S. population. When first issued, revised estimates are independent of all other estimates, including the national population total. But the national population estimate is fixed, so ultimately, the population estimate for one area cannot be increased without decreasing the estimate for other areas.

This zero sum requirement reflects the need for fairness in using estimates to distribute funds, and is consistent with the objective of producing the most accurate estimates possible – across all areas. But the zero sum requirement poses a challenge, as the Census Bureau needs to tap the strengths of new data resources while guarding against adding population to some areas at the expense of unsubstantiated population loss in

others. Proposals for the use of the Master Address File and housing unit methods are sensitive to this requirement, but these options have their own issues, and the Census Bureau will want to consider them along with other options.

To conclude, the Census Bureau is up to the challenge of improving its population estimates, and appears ready to take steps in that direction. But users need to maintain realistic expectations. Even in a best case scenario, with notable improvements to accuracy, the Census Bureau's population estimates will still be estimates, and subject to error. Improvements may reduce the frequency of challenges and the magnitude of revisions, but some local governments will still dispute their population estimates, and we can expect continued pressure for revisions. This is the imperfect nature of population estimates. And from the broader perspective, businesses will continue to benefit from the significant value that these imperfect estimates provide.

Thank you, and I look forward to your questions.

Mr. TURNER. Thank you so much.
Dr. Brown.

STATEMENT OF WARREN A. BROWN

Mr. BROWN. Chairman Turner, Ms. Norton, thank you for the opportunity to be part of this hearing on the Census Bureau's population estimates. I direct Cornell's program on applied demographics. I am a research director for the New York Census Research Data Center, which is a consortium of research institutions in the New York Metropolitan Area and upstate New York. And I represent New York State in the Federal-State cooperative for population estimates. I am a past chair of that group's steering committee.

I appreciate the opportunity to share my observations regarding the Census Bureau's population estimates activities, and I'm drawing upon a number of years of experience working with the folks at the Census Bureau and advocating on behalf of communities and counties in New York State as well as aware of what is going on in other States around the country.

My written testimony and a copy of a paper I co-authored with Joe Salvo of the New York City Department of City Planning for a Census Bureau conference on population estimates has been referred to numerous times so far today have been entered into the record, or I have submitted them for the record.

There are two things from my written testimony that I would really like to focus on. The first is error, then correcting those errors. Population estimates are not perfect. And as a decade goes along, typically the errors mount up, and we get further and further away. I think it is unrealistic to expect an estimates process to nail the subsequent decennial census right on the head.

That said, the Census Bureau has produced a research file that allowed their current major methodology to work without the benefit of challenges, without the benefit of review from the States. It was an opportunity to see how good is the administrative records component method. It produced estimates for April 1, 2000. The estimates for the Nation were low, they were 6.8 million low. That number or that percentage was a 2.4 percent error. If that error had been equally distributed across all of the local areas, the cities, the counties, the municipalities, then we might have had error in the census, but at least they would have been equitable and they would have been evenly distributed. They were not.

The greatest underestimate was the District of Columbia at minus 9.3 percent, Nevada at minus 6.8, Arizona at minus 5.4, and Rhode Island at minus 5.1. Clearly that methodology does not do a very good job with areas as diverse as the District of Columbia, Nevada, Arizona and Rhode Island.

The challenge process, it has been observed that there are a number of challenges that have taken place, and yet of the almost 40,000 areas of local government, the fact that there were 38 challenges, successful challenges in 2004, it is an infinitesimal proportion of all area. Obviously there are errors out there.

When a challenge is successful, what are the benefits? What happens? The graph that I have submitted here shows the changing nature of State population. This is a State as large as New York

State. I have expanded the vertical axes to accentuate the differences, if you will. But you can see that the estimates that were produced in 2005 incorporated the challenges that were made in 2004. They incorporated them for 2004. So if you focus on 2004, you will see that the number is substantially larger in the 2005 estimates than it was in the 2004 estimates. It reflects that adjustment.

The 2005 estimate was based on the same methodology and shows a downturn in the population. As we have talked about the perception of growth, change or decline, it is very important, and what this tends to show is that we have a declining population in New York State. We think the challenge that we are currently engaged in will correct that.

In summary, getting estimates right the first time or at least with maximum accuracy, precision and equity, calls for fuller partnership between Federal, State and local governments. Thank you for inviting me to participate in this oversight hearing.

[The prepared statement of Mr. Brown follows:]

Statement of

Warren A. Brown
Senior Research Associate
Director, Program on Applied Demographics
Research Director, New York Census Research Data Center
Cornell Institute for Social and Economic Research
Cornell University

Before the
Subcommittee on Federalism and the Census
Oversight Hearing

Committee on Government Reform
U.S. House of Representatives

Hearing Topic: "Two Plus Two Should Never Equal Three: Getting Intercensal Population Estimates Right the First Time."
Wednesday September 6, 2006
Room 2247 Rayburn House Office Building

Introduction

Chairman Turner and members of the House Government Reform Subcommittee on Federalism and the Census, my name is Warren Brown and I am a demographer at Cornell University in Ithaca, New York. Thank you for the opportunity to be part of this hearing on "Two Plus Two Should Never Equal Three: Getting Intercensal Population Estimates Right the First Time." I direct Cornell's Program on Applied Demographics and am Research Director for the New York Census Research Data Center, a consortium of research institutions in the New York metropolitan area and upstate New York. I graduated from Cornell University in 1982 with a Ph.D. in Sociology and minors in Demography and American History. I began my career in demography as a graduate assistant at Cornell working with Cooperative Extension on program planning. I learned to apply demographic information in planning programs ranging from nutrition education for low income families, to agricultural land preservation in rapidly suburbanizing communities, to urban gardening in New York City. I was introduced to methods for estimating population when I attended a short-course conducted by Don Starsinic and Fred Cavanaugh of the Census Bureau in 1978. I have been working with demographic estimates and projections ever since. I represent New York State in the Federal State Cooperative for Population Estimates, and am a past chair of its Steering Committee.

Observations on the Census Bureau's Program for Population Estimates

I appreciate the opportunity to share my observations regarding the Census Bureau's population estimates activities. These are largely based on my experience

working with staff in the Census Bureau's estimates program on behalf of New York State. My testimony covers four areas: 1) population estimates are important; 2) estimates are not perfect; 3) description of the current programs to make and correct estimates; and 4) ways to improve population estimates.

Population Estimates are Important

Title 13 of the U.S. Code—the law that authorizes and regulates the Census Bureau—requires that the Bureau produces population estimates for all states, counties and local units of general purpose government. The reason for producing estimates, given in Section 183 of Title 13, is "for the purpose of administering any law of the United States in which population or other population characteristics are used to determine the amount of benefit received by State, county, or local units of general purpose government..." The exact amount of money distributed by the federal government on the basis of the population estimates is hard to determine and estimates range from $100 billion to $200 billion. Suffice it to say, a considerable amount of money is allocated on the basis of these numbers.

The Census Bureau itself is one of the primary consumers of the estimates. The Bureau uses the post-census estimates as controls for its various surveys, including the Current Population Survey and American Community Survey. The estimates must be delivered within a relatively short time frame for use in the weighting and estimating stages of surveys, which in turn must be produced by their deadlines. Private sources of investment affecting states and local governments use the estimates as well in order to identify growing markets. Most of the private sector data vendors control their estimates of population size and consumer characteristics to the Census Bureau's estimates of counties and municipalities. The estimates are also grist for the media informing their publics as to the fortunes of states, regions and communities. Each time the Census Bureau releases a new set of estimates eager reporters contact those of us who labor in this area of demography, asking us why an area grew or declined. Then subsequent to the publication of the estimates, representatives of local governments reacting to the news articles, call attention to the estimates as a sign of local prosperity or discredit the estimates and question their accuracy.

Estimates are Not Perfect

Population estimates are not perfect and some error is inevitable. The goal is to minimize error and produce estimates that are as accurate, precise and equitable as possible. The decennial census is used as a starting point for estimates in the post-census interval and as a standard for evaluating estimates at the end of the decade once a new census is conducted. In general, estimates are not intended to overcome shortcomings in the decennial census, rather the objective is to produce estimates of population and characteristics that would be reported if an enumeration of the population, on the order of the previous census, were conducted. The Census Bureau itself is the source of some of the best information on the quality of their post-censal estimates. They produced a file of population estimates for April 1, 2000 based on the 1990 Census in order to evaluate the level of error in their methods. The estimates were low and the national estimate of population was 6.8 million persons below the Census 2000 count of resident population. That was a -2.4 percent error. Had all states, counties and municipalities been similarly

low then at least the estimates would have been equitable. They were not equitable, however. While the population estimates for all states were low and not one state was overestimated, there were inequities. On a percentage basis the states with the greatest under estimates were the District of Columbia at -9.3 percent; Nevada at -6.8 percent; Arizona at -5.4 percent; and Rhode Island at -5.1 percent. The Census Bureau's population estimates were less than 1 percentage point off for West Virginia, Michigan, Ohio, Alaska, and Kansas.

Demographers tend to focus on the accuracy and precision of estimates, while the issue of equity is the least pursued even though it is perhaps the most important dimension to quality. David Swanson [Swanson, David A., "Allocation Accuracy in Population Estimates: An Overlooked Criterion with Fiscal Implications," in *Small Area Population Estimates: Methods and Their Accuracy and New Metropolitan Area Definitions and Their Impact on the Private and Public Sector*, Series GE-41, No. 7 (Washington, DC, Government Printing Office, 1981), pp. 13-16] discusses this issue in the use of estimates to allocate monies. Swanson developed the "Index of Misallocation" as a summary measure of the shares based on an estimate that would need to be reallocated in order to match shares based on a census count. If we look at how monies would be distributed to the states on the basis of the Census Bureau's research estimates for April 1, 2000, we get a better sense of the inequities. The District of Columbia's share was 7.0 percentage points below what it should have been, while West Virginia's was 2.2 percentage points above its actual share based on Census 2000. Table 1 provides a summary of the necessary reallocation of shares to states, as expressed in the previous sentence.

Current Programs to Make and Correct Estimates

The Census Bureau has a number of programs in place to improve the quality of its estimates. The most effective has been the Federal State Cooperative for Population Estimates (FSCPE). Each state appoints a representative, typically the state demographer, to participate in the FSCPE. The Census Bureau represents the federal government. The National Governor's Conference and the Council of State Governments sponsored the 'First National Conference on Comparative Statistics' in 1966. Out of this conference the FSCPE began to evolve from an informal arrangement between the Census Bureau and state demographers and by 1973 became a formal organization. The by-laws of the FSCPE call for:

- promotion of cooperation between the states and the U.S. Census Bureau;
- preparation of a set of consistent and jointly prepared county and subcounty estimates with complete state coverage;
- assurance of highest quality estimates through the use of established methods, comprehensive data review and thorough testing;
- reduction of duplication in the production of population estimates and improvement of communication among the groups compiling population figures;
- improvement and advancement of techniques and methodologies and the encouragement of joint research efforts; and
- enhancement of the recognition of local demographic work.

During the 1980s the Census Bureau and the individual states jointly selected methods most appropriate for that state. Two or three methods were employed and the results were averaged in order to arrive at estimates for the state's counties. The selection of methods was determined by rigorous testing against the 1980 census. If a state had a unique data source that worked well for that state—such as California's driver license address change file—then it was used. Different methods using different data were the practice.

Under pressure to streamline the estimates process and produce a uniform methodology, the Census Bureau adopted a single method approach to estimates in the 1990s using primarily federal administrative records to estimate components of population change. The previously active participation of states in the production of estimates was reduced to an advisory and review role. The states do have an opportunity to review the Census Bureau's data on births, deaths, internal and international migration for the population estimates and data on building permits, mobile home placements and loss of housing for the housing unit estimates. The Census Bureau has established an online clearinghouse for state representatives (FSCPE members) that posts the issues raised by states in this review process and the responses of the Census Bureau. The Census Bureau began the clearinghouse with comments on the estimates being prepared for 2003. The clearinghouse covers comments for 2003 and 2004, and comments for 2005 have not yet been added. Slightly less than half of the states have participated in the clearinghouse which is a vital early step in pointing out problems with county and sub-county estimates.

Once estimates have been made official and publicly released, local governments have the opportunity to challenge the numbers. Frequently the state's FSCPE representative will contact the local government suggesting they challenge, or respond to an expressed interest by the local government in challenging the number. The Census Bureau's challenge process is far more collaborative than adversarial. The Census Bureau provides the local government with guideline materials, a workbook for preparing their challenge, and informs them that their state FSCPE representative is available to provide technical assistance in preparing their challenge. The challenge process uses an alternate methodology, the Housing Unit Method, to prepare estimates. The Housing Unit Method is widely used by states and local governments in preparing their own estimates, independent of the Census Bureau, and has the potential for producing good quality estimates. A variation of the Housing Unit Method is used by the Census Bureau to prepare its sub-county estimates. One of the reasons it is not used by the Census Bureau for preparing their county estimates is the problem in getting quality input data in a timely manner. Most of the inputs are from local administrative records. It is an appropriate method for locals to use in challenging the county and sub-county population estimates. County estimates are based on federal administrative records on internal migration (matched IRS tax returns and Medicare enrollments) and guesstimates of international migration; and sub-county estimates are based on the Census Bureau's survey of local governments regarding residential building permits, and weak estimates of mobile home placements and loss of housing units.

The number of successful challenges has increased each year. In 2001 there were 3 successful challenges; in 2002 there were 14; then 27 in 2003; and 38 successful challenges in 2004. So far in 2005 there have been 8 successful challenges but the books

are not yet closed on 2005. These represent an exceedingly small fraction of the units of local government for which estimates are prepared. Given the errors we cited in the estimates of state population earlier in our testimony, we have to conclude that the vast majority of local governments are unaware of errors in estimates of their population or are not taking advantage of the challenge process. This may be a resource issue and therefore the fairness of the challenge process itself may be subject to inequitable conditions. We also have to note that none of the challenges since Census 2000 have resulted in a lower estimate, although we suspect that in some cases the Census Bureau estimates for local areas may be too high.

But even for those units of local government that have successfully challenged the pay-offs are limited. At what point are the allocations of funds based upon the estimates being made? Do any of the allocation programs wait for the outcome of the challenge process or re-allocate monies once challenges have been settled and corrected numbers are released? The Census Bureau's surveys that use the estimates as controls in making their reports don't use the corrected estimates either. The Current Population Survey and American Community Survey use the initial estimates and do not revise their reports to reflect the corrected totals. New York City is preparing its third consecutive challenge to the Census Bureau's estimates. Although they were successful in challenging the 2003 and 2004 estimates, the Current Population Survey and American Community Survey for those years don't reflect the corrected data. Correcting the estimates after they are released does not necessarily correct all the downstream uses made of the initial estimates.

In Figure 1 the Census Bureau's estimates of population for New York State are displayed for the years 2000 through 2005 produced in Vintages 2003, 2004 and 2005. Focus on the differences between estimates for the same year produced in the different vintages. Note that the differences are very slight for July 1, 2000 and increasingly pronounced with each subsequent year. On a percentage basis the differences are still slight and by narrowing the range of the vertical scale to vary between 18.85 million and 19.35 million I have accentuated the differences. The greatest difference is between the Vintage 2004 and Vintage 2005 estimates for 2004. The numerical difference is 53,639 which is only a difference of 0.28 percent. What makes this small difference meaningful is the difference it makes in the trend line. It is the difference between continued growth and a downward decline. The Vintage 2005 estimates of county population for 2005 are going through the challenge and revision processes and are likely to make 2005 look slightly different in the Vintage 2006 estimates.

The estimate of national population does not change and so the challenge and revision process is a zero-sum game. The population increases of counties gained through the challenge process are subtracted from the balance of counties in the country. To simplify, if you are not successfully challenging then you are losing. The losses are small when spread across all the remaining counties, but that is why some counties, and their states, increase in population for a given estimate year with succeeding vintages and others decrease. Which are the correct estimates for New York State for 2003, 2004, and 2005? Which estimates should be used for the allocation of resources, as controls for surveys whose data are used in the allocation process, and as a signal to private investors and the public as to the trend line in growth, stability or decline?

The answer is obvious. Use the correct estimate and get it right the first time! How can that be done?

Improving Population Estimates

The way to correct the dilemma of which vintage estimate to use for a particular year is to get the estimate right the first time, less obvious is how to do that in a cost effective and timely manner given budgetary and reporting deadline constraints. The Census Bureau sponsored a conference titled, "U.S. Census Bureau Population Estimates: Meeting User Needs" that was held July 19, 2006. At the conference, Joseph Salvo of the New York City Department of City Planning, and I made a presentation titled, "Population Estimates and the Needs of Local Governments." I am submitting a copy of that paper in addition to this testimony. Here I wish to summarize some of our points.

The current procedure used by the Census Bureau to estimate county population relies entirely on a single method, called the Administrative Records Component Method. Reliance on a single method using administrative data from federal agencies has the advantage of streamlining the estimates process and allowing the estimates to be produced in a timely manner. The disadvantage is that individual methods tend not to work equally well for all counties. A second disadvantage is that relying entirely on a few administrative record series leaves the method vulnerable to changes in those series that render the input data less consistent and accurate. The Administrative Records Component Method had relied on immigration statistics from the Immigration and Naturalization Service (INS) in order to allocate estimates of international migration to individual counties. Following the terrorist attacks on September 11, 2001 the role of INS shifted toward national security and away from immigration statistics. This left a void that required the Census Bureau to make "guesstimates" regarding the counties of destination for international migrants.

The use of multiple methods provides more stability and complementary strengths in working with a diverse array of counties. Prior to the emphasis on streamlining, the use of multiple methods and more sources of inputs had been championed by the Census Bureau itself. Evaluation research has shown that the averaging of methods produces better quality estimates than any single method alone. Among the methods that ought to be used for county estimates is the Housing Unit Method. The Housing Unit Method calculates the population in households as the product of housing units, occupancy rates and average household size. When persons in group quarters (i.e., prisons, nursing homes, dormitories and other facilities) are added to persons in households, an estimate can be created for the total population. In the Census Bureau's guidelines for challenging estimates, the Housing Unit Method is the accepted alternative to the Administrative Records Component Method. Why not employ the Housing Unit Method, along with the Administrative Component Method to begin with, rather than in a challenge process after release of the official estimates?

Implementation of the Housing Unit Method and other methods as well, will require a closer working relationship between the Census Bureau, the state representatives of the Federal State Cooperative for Population Estimates, and local governments. This calls for a return to earlier practices when the states were full and equal partners with the Census Bureau in the estimates process. Calling for such a partnership is easy; however making it work will be a difficult undertaking. The Census

Bureau has excellent partnership programs, and in addition to the Federal State Cooperative for Population Estimates there are the State Data Centers and the Census Information Centers representing the interests of underserved communities. On the research side, the Census Bureau's Center for Economic Studies administers a network of Census Research Data Centers located at major research universities and similar research institutions. These Census Research Data Centers could serve to facilitate joint efforts between staff at the Census Bureau and external researchers to experiment with multiple methods for estimating population and to develop improved approaches. The Census Bureau's Longitudinal Employer Household Dynamics Program (LEHD) could serve as a model for collaboration between internal and external researchers to develop superior data products. The LEHD Program is providing timely and detailed information on labor markets that go well beyond what was previously available.

In summary, getting estimates right the first time (or at least with maximum accuracy, precision and equity) calls for a fuller partnership between the federal, state and local governments; use of multiple methods; and research on the integration of administrative records—federal, state and local—with sample survey information.

Thank you for inviting me to participate in this oversight hearing.

Figure 1: Estimates Are Subject To Revision

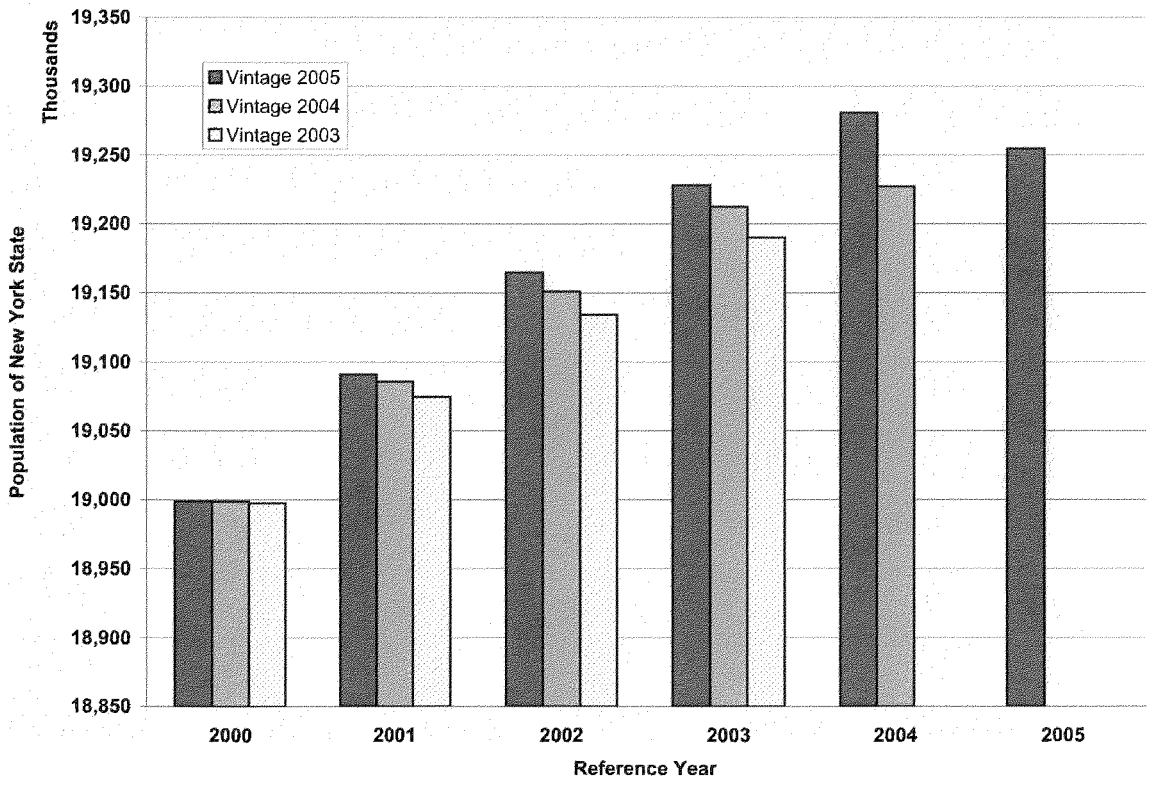

Table 1: Misallocation to States Based on Research Estimates for April 1, 2000

State or District	Pct Error
Alabama	1.0%
Alaska	1.6%
Arizona	-3.0%
Arkansas	-1.4%
California	1.4%
Colorado	-1.9%
Connecticut	-0.9%
Delaware	-0.6%
District of Columbia	-7.0%
Florida	-2.0%
Geogia	-1.1%
Hawaii	-0.3%
Idaho	0.4%
Illinois	0.4%
Indiana	0.6%
Iowa	0.7%
Kansas	1.5%
Kentucky	0.9%
Louisiana	0.3%
Maine	1.0%
Maryland	0.8%
Massachusetts	0.0%
Michigan	2.1%
Minnesota	0.3%
Mississippi	0.2%
Missouri	0.6%

State or District	Pct Error
Montana	0.7%
Nebraska	0.0%
Nevada	-4.5%
New Hampshire	0.5%
New Jersey	-0.2%
New Mexico	-1.7%
New York	-1.4%
North Carolina	-1.7%
North Dakota	0.6%
Ohio	1.7%
Oklahoma	0.3%
Oregon	-0.1%
Pennsylvania	0.0%
Rhode Island	-2.8%
South Carolina	0.0%
South Dakota	0.0%
Tennessee	-0.6%
Texas	-0.2%
Utah	-1.0%
Vermont	0.4%
Virginia	0.6%
Washington	0.8%
West Virginia	2.2%
Wisconsin	0.7%
Wyoming	-0.3%

Mr. TURNER. Thank you. First for questions we will turn to Ms. Norton.

Ms. NORTON. Thank you, Mr. Chairman. Let me very quickly ask a set of questions to the District of Columbia.

You say in your testimony, and here I am quoting from page 2, "The District of Columbia was not about to sit silently by for another 10 years and experience, among other things, an erosion of Federal funding." And then you say, after release of the 2005 population estimates in December 2005, the District "was ready to act."

Now, you heard me be very tough on Mr. Kincannon.

Ms. PHILLIPS. Yes, I did. [Laughter.]

Ms. NORTON. And you heard me promise I was going to be fair, and be equally tough on the District of Columbia. Perhaps you left out something. But I asked him about 4 years and your testimony seems to indicate a challenge to a place in 2005. Would you care to comment on the disparity there, if any?

Ms. PHILLIPS. Yes, I can. I can only speak for when I took the job as——

Ms. NORTON. Well, that won't do. He couldn't get away with that, and I have to tell you, all of us have to take, we can't say, the member who was here last messed up.

Ms. PHILLIPS. Right.

Ms. NORTON. So don't blame me. This happened on the watch of the Mayor of the District of Columbia.

Ms. PHILLIPS. Yes.

Ms. NORTON. He has been a good mayor. And I am asking you, let me be specific, when was the first challenge filed to the 2000 census?

Ms. PHILLIPS. From my research, the first challenge was filed in 2005. When I took the job in February 2005, we began looking at the information to file the challenge. When the 2005 population estimates came out in December, then we got the official piece together and the challenge was actually filed, I believe, in March 2006.

Ms. NORTON. OK, you know what, was it done with any guidance from the Census Bureau?

Ms. PHILLIPS. It was done with guidance, and that is why I am going back to, I can speak to when I came. When I came on board, I realized there was a problem. I contacted the Census Bureau, and they did engage in discussions with us as to what it entails in filing a challenge.

As you have seen in my stated testimony, we did have that discussion at the regional office, the Washington Council of Governments. And we were still not pleased with the results of that discussion, and that is why we went ahead and did the challenge.

Ms. NORTON. I need you to go back and speak with the Mayor. When was the Mayor elected?

Ms. PHILLIPS. Well, the Mayor has——

Ms. NORTON. He's completing an 8-year term. When was he elected?

Ms. PHILLIPS. In 1999.

Ms. NORTON. This is a mayor that has a very good reputation in the Congress and he has a very good reputation with me.

Mr. TURNER. I can add to that, he has an excellent reputation.

Ms. NORTON. We have seen palpable improvements in the government. We are really not in the blame game, we are in the making sure that we get everybody doing his or her part. And then seeing, because you heard who I am going to hold responsible. I don't fund you to do this.

Ms. PHILLIPS. Right.

Ms. NORTON. We fund Mr. Kincannon.

Ms. PHILLIPS. That's why I made sure when I came on board——

Ms. NORTON. So I need you to go back—I only have so much time—I need you to go back and I need you to come into my office with people who were there at the time, so that I can understand, since the Mayor has been complaining about this virtually since he took office, why no challenge was made. And the reason I want you to do that really goes to my next question, which goes to our various experts.

Suppose the challenge isn't made and the corrections made. However, perhaps the corrections are made without the challenge. I wasn't able to find that to be the case. But if you have an accumulation of time without corrections, does that mean, what does that mean concerning accuracy or inaccuracy of the next decennial census? Do any of the experts care to focus on this?

The reason, the predicate for that question is that Congress is spending money to have it done on a virtually, well, not an annual basis, but to have it done often. And I thought the premise was, the more often, the closer to the data and the change in the data, the closer you get to accuracy, so by the time you get to the 10-year period, you say, well, let's look back, when all the witnesses are gone and you get what Ms. Phillips just said, well, I wasn't there then, Congresswoman, you can then speak with the people who have the responsibility.

So I am asking you what the net effect is, in your judgment, on accuracy, if corrections are not appropriate made on a timely basis by whatever, on whatever basis, challenged or not?

Ms. PHILLIPS. From the information we have, we can see that it affects numerous programs.

Ms. NORTON. No, please, I'm asking this—they are going to call time on me. I am asking this, I am not directing this to you, Ms. Phillips, and I understand what the difficulty is. You are going to get, you all are going to come in and see me. I don't want a letter. You don't have to come far. And I am here to try to work with—we are having a new mayor, Mr. Chairman. So I want to work with whoever that new mayor is.

But I want to know from the experts now, the people who are outside experts, objective experts, what is the cumulative effect if the updates don't occur on an active fashion? Yes, sir, Mr. Brown?

Mr. BROWN. Let me point to two areas. The address list that has already been described as New York City was very successful in getting a more accurate count by vigorously developing its own address list to compare against the Census Bureau's address list, part of the housing unit method and what David Swanson has been referring to as an ongoing registry of housing units and those addresses to be used in the estimates process is probably the single most important thing you can do to ensure an accurate census count.

So if you will, the estimates are like a dress rehearsal for the decennial census.

Ms. NORTON. As often as you can do them?

Mr. BROWN. Get your act together, get your resources together and maintain a complete and accurate listing.

Ms. NORTON. So in your judgment, you will have a more accurate census at the end of the period if you did that?

Mr. BROWN. Absolutely. And the second, which is almost like closing the barn door after the cows have left, is during the review process, did we get good coverage, because the States participated with the Census Bureau in reviewing the Census 2000, is to compare the estimates to the count. If the estimates are low and the count was low, it is not going to be surprising. But if the estimates are high and the count was low, then it is going to cause concern that maybe we missed something here. So getting that estimate correct is incredibly important.

Ms. NORTON. Yes, sir, Mr. Hodges?

Mr. HODGES. Put another way, with some of David Swanson's recommendations for the housing unit method and the use of an Master Address File, if one goes that route with the estimates, you are then building estimates with sources that are more similar to those that contribute to the census count itself. Whereas right now, with the component method, as well as it works in some areas, it is a very different process than that for the census.

So whether the ultimate census counts themselves are more accurate or not, you would have results that are more similar.

Ms. NORTON. Interesting.

Mr. SWANSON. If I could add one other point.

Ms. NORTON. Yes, sir, Mr. Swanson.

Mr. SWANSON. This goes back to my experience in Washington State, which started its estimates program in 1942. The benefit of having a housing unit method and having a registry for housing that I suggested is that I have seen in action, when you use housing unit method estimates for cities, and there were 265 in Washington State when I worked there, is that when you had a dispute with the local government, you had a method of self correction. The elements that go into making the housing unit method work are exactly the elements you need when you do a census count. And the cities would provide the housing unit numbers to the State, the State demographic center, as we started to develop the estimates for the cities.

So the disputes usually, they would boil down to two issues, what was the vacancy rate and how many persons per household were there in each of them. And we could solve those easily with the census and/or if it was a larger town where census was costly and prohibitive from that regard, for example, Seattle, we never did a census in Seattle, but we certainly did a lot of sample surveys to update the information that we used in the housing unit method.

So what you get is a system that is self-corrective. In that regard, I am in full agreement with what Warren said and what Ken said. It is one of the reasons I recommended looking into the math, is that if you are using something like that, you have a head start for having a pretty clear idea of what the census is going to come about with.

Ms. NORTON. And that is a concern of the Congress, the accuracy concern is, it is not a member, particularly in the House, which is done by reapportionment.

Mr. Chairman, I just have two questions. One, I really am interested in, Mr. Brown, in page whatever it is in your testimony. As I say to my students, number my pages, after all, I don't count, your grade is not based on the number of pages but on the content here.

You name the jurisdictions that had the greatest underestimates, the District of Columbia led. And I kept looking for what these jurisdictions might have in common, District of Columbia, Nevada, Arizona and Rhode Island, in that order. Do they have anything themselves in common, or how would you, what would be your professional judgment for the reason?

Mr. BROWN. Nevada and Arizona, rapidly growing, the two fastest growing States in the country. So the growth is just outpacing our ability to estimate the population.

Ms. NORTON. Oh, well, that is what we pay the statisticians for. But I hear you. I hear you, this is what, when I asked Mr. Kincannon, I said, are you keeping up with a society that changes overnight, and yes, we are going to expect the statisticians to be smart enough to figure that out. But I hear you. That is not a criticism of you. But go ahead.

Mr. BROWN. The District of Columbia I think is sort of encapsulates everything that is a weakness in the administrative records component method. College students, immigrants from abroad.

Ms. NORTON. Transients who come here to work.

Mr. BROWN. Transient population that is present perhaps in Providence, Rhode Island, and since Rhode Island is a small State, Providence dominates it. And we know that it is present in New York City. So I think you have large urban center problems, you have rapidly growing State problems. Not a common thread between the four States, but two threads that I would lump them into.

Ms. NORTON. Thank you. That is very helpful. This is what I'm going to press the Census Bureau to understand. And I understand all that you all have been saying about conformity, apples to apples. But then the science and the skill is in making that happen while acknowledging differences. I think that is hard, and I say so from the work the GAO did on the District and the structural imbalance. So I don't see this as anything but very difficult, but a wonderful challenge, it seems to me, for somebody in your profession.

Could I ask, experts, hey, look, is it almost always an underestimate? Do they ever go the other way? I know one time they do is when they give people who don't have a ny population but have a lot of prisoners a lot of money for Title I, people who are not going to school and can't. But I am saying, in the general course of things, is the basic rule that if they are going to err, they are going to err on the side of what they consider caution, which is low, rather than high? Is that how it happens?

Mr. HODGES. Very briefly, there are a great many over-estimations among those of us who do population estimates. Warren Brown mentioned the roughly 6 million——

Ms. NORTON. I am trying to find the frequency. Is the frequency with, because I am sure everybody can find somebody. Is the frequency with too low rather than too high and how often would you rate how often, knowing full well that you can't give me a statistically accurate number. Is it rare for there to be more population assigned than——

Mr. HODGES. Let me suggest, without having notes with me, that probably varies from year to year. In the 2000 census, the estimates were lower than the count. In the 1990 census, if I recall correctly, the count came in lower than the estimates. So that while with 2000, there more likely would have been under-estimates, in 1990, quite the opposite may have been true.

Ms. NORTON. It certainly wasn't true for the District of Columbia.

Final question, Mr. Chairman, then I am through. I wonder whether particularly the experts have anything to say about what Ms. Phillips said. She did indicate that there were difficulties with data sharing. And I don't know whether changes in statute might be necessary or whether this data sharing, for example, on group quarters was a matter of privacy, was it statutory, does it need to be changed? I was not sure the meaning of that data sharing and why, when the Census wants to get a collegial process going, there would be that problem.

Mr. SWANSON. I can't speak exactly to the Census Bureau, but I know in some cases where I've dealt with population estimates, some group quarters populations are extremely sensitive. For example, shelters for abused women. So you can understand why they don't want to share information.

Ms. NORTON. Just a number?

Mr. SWANSON. Well, I can just say for some types, there are issues of sensitivity.

Ms. NORTON. But wait a minute. They are sharing it with people in their own jurisdiction.

Mr. SWANSON. I have had people tell me in other States the same thing, not the Census Bureau, but in my job as a State demographer in other places where people were hesitant to give that information to me.

Ms. NORTON. Yes, that is a demographer. I am saying, is there any valid reason, perhaps statutory, that you know of why the Census would be cautious about sharing information such as group quarters?

Mr. SWANSON. Yes. What we do as State demographers in the cooperative is we develop a list of every group quarters facility in our State. We don't track them all, but we track the major ones. We identify where they are located and we give them the number of people that are there.

The information flows to the Census Bureau. Once it becomes part——

Ms. NORTON. So you know it, you can go in those places yourself, then.

Mr. SWANSON. Absolutely.

Ms. NORTON. So you know what is in there. So what is the problem with data sharing, then, about group quarters? You give them the information to say, in this homeless shelter there are, in this

abused, whatever, there are? That is where they get it from in the first place.

Mr. SWANSON. The Census Bureau is quite proud of the fact that it is a one way relationship, that because of Title 13, once data comes into their records and becomes part of their information, they cannot share it back.

Ms. NORTON. With the jurisdiction that provided the data?

Mr. SWANSON. That is correct.

Ms. NORTON. Ms. Phillips, is that what they told you?

Ms. PHILLIPS. Yes, the Title 13, I wanted that list of group quarters so that I can compare 2000 with 2005. And they could not share that list with me. So when I submitted my list, what they were saying is my list was different from the list that they had in 2000, so they could not use the updated numbers.

Ms. NORTON. Mr. Chairman, I really would ask that matter be looked at very—I did not have this question to ask the Census Bureau. That is why I asked about privacy and the rest of it. But I am astonished that this kind of information, which the District of Columbia can walk into any facility, all of them have to be licensed, all of them have to comply with the law. I don't see the privacy issue. I don't see any—the only thing I could see is there could be something statutory. I will look at that.

But other than that, this is the kind of thing, if all I know is what you all are telling me, it is what yields disrespect for Government. If you say, you provide the data and then we challenge the ultimate data and say, we want to specifically see how you are counting X data, which we earlier provided you, and we say, oh, no, no, we can't let you see that, even though we got it from you, that is nonsense. And considering the testimony we have received about the importance of group quarters, and the housing component of the census, it does seem to be a central question of data sharing for the Census Bureau that says above all, it wants a collegial relationship.

And I thank you, Mr. Chairman.

Mr. TURNER. Thank you, Ms. Norton.

For the record, I want to note that my district, which is anchored predominantly by Dayton, OH, according to the last estimates, lost 4.4 percent, reducing the community to 158,000. My district also reaches down toward Cincinnati, and according to the Cincinnati Post, they began with this headline that the city leads in population loss. It says that in the last 5 years, it has the highest rate of any major American city as a result of recent estimates of losses in population.

So we have identified the issue of Federal funds. We have identified the issue of businesses that locate in the area. But there is also the overarching issue of perceptions of a community and the impacts that it can have in long term strategic planning, based on estimates that may or may not be accurate.

And I am going to conclude, I also want to recognize that Charlie Dent of Pennsylvania has joined us, who has been very active on this committee and in the issue of the census.

One of the issues that Director Kincannon seemed comfortable with was the ability of communities to object, both their knowledge and awareness of the process, their access to data and expertise

that could result in a successful challenge. I would like if each of you would, in conclusion, as a conclusionary question, but I am going to give you one opportunity also to add anything to the record that you want, tell us if you believe that communities have the accurate information of the process and the expertise generally to go through the processes that New York City and D.C. have been successful in.

And I want to highlight just one other thing that Director Kincannon had said, that I think was perhaps not accurate, and that is, he concluded that by the fact that there were communities that were going through the process that therefore it must be available and accessible. We don't necessarily have data about, unless you can contribute that in this hearing, of communities that have not gone through the process that have wanted to.

But if you would please comment on that.

Mr. BROWN. I would be happy to start. I think the State representatives in the Federal-State co-op need to do a better job educating their counties and their communities. I think the Census Bureau charges us with that responsibility. We want to develop a relationship with our counties and our communities that, I talk more communities out of challenging that I do into challenging, even though New York is one of the most active challenge States, that I am sure that my friends at the Census Bureau think I go around drumming up challenges, that we get communities that are upset. We walk through the data with them and say, you don't have any grounds.

So anyway, I would say that if a community is not, in New York State, is not aware, then it is my failing as much if not more so, than the Census Bureau's.

Mr. TURNER. Mr. Hodges.

Mr. HODGES. I would hope that communities are aware of the opportunity to challenge and do have equal access to that opportunity. But I would be surprised if the ability to challenge and the inclination were equal across the board for 39,000 government units. That would be surprising.

Mr. TURNER. Ms. Phillips.

Ms. PHILLIPS. I would agree with what the past two speakers have said. The information is published on the Census Bureau's Web site, in terms of the challenge process. So anyone can access it. But I think the problem lies with the resources that are available within each one of those jurisdictions. It does take a lot of work to get the challenge through.

Mr. SWANSON. The key to answering that problem, I think, lies with the State demographic centers. And there is a lot of weak State demographic centers. In some States, they don't exist. I think what Warren said about New York puts that in a totally different situation, where they are working actively with the local governments. That wouldn't happen in Mississippi. We don't have that kind of activity.

Texas is a much better situation, because it has the capabilities to do that. They are active partners in the Federal-State cooperative program for population estimates, and they have experienced people there. But Alabama and Mississippi do not. And I think that

reflects down to the fact that the cities are not in a very good position to challenge because they lack that kind of a local contact.

Mr. TURNER. For each of you, before we conclude this hearing, you have heard both the questions that we have had, the testimony of Director Kincannon and the testimony of each of you, I want to give you an opportunity, if there is anything you want to add to the record before we close. Dr. Swanson, I will begin with you, if there is anything that you would like to add to the record as a concluding remark.

Mr. SWANSON. The MAF, the MAF, the MAF. I think it is one of the keys to having a good estimation system, and I think it will tend to resolve lots of problems, including the one I am most concerned about, and that is the escalation of conflict between the Census Bureau and all these other stakeholders.

Mr. TURNER. Ms. Phillips.

Ms. PHILLIPS. What I wanted to add is in terms of my first recommendation, and that is for more direct communication. I refer to it as that trigger that should indicate when there is some dramatic increase or decrease in the numbers, that the Census needs to reach out to the local community to sort of understand what is going on at the grass roots level. I think that is quite important. You referred to it as a trip wire. And I think if that something is put in place to ensure that when these triggers occur, that there is a followup with the local community, then we can arrive at better estimates in the future. Thank you.

Mr. TURNER. Mr. Hodges.

Mr. HODGES. Nothing to add. Thank you very much.

Mr. TURNER. Mr. Brown.

Mr. BROWN. In the 1980's, the Census Bureau and individual States jointly selected methods most appropriate for that State. There was not a one size fits all approach. In the 1990's, there was pressure to streamline the process, to do it more quickly. I would like to see us return to a more full and open partnership with the States to find methods and input data that work best for the people of that State and do it State by State.

Mr. TURNER. I would like to thank each of you for participating today, both in the preparation that you have put forth in your written comments and also your participation here. I appreciate your willingness to share your expertise and your thoughts on population estimates.

I would also like to thank all of my colleagues for their participation. In the event that there might be additional questions that we did not have time for today, the record shall remain open for 2 weeks for submitted questions and answers.

I want to thank you all, and with that we will be adjourned.

[Whereupon, at 4:02 p.m., the subcommittee was adjourned.]

[The prepared statement of Hon. Wm. Lacy Clay and additional information submitted for the hearing record follow:]

Statement of Representative Lacy Clay
Ranking Minority Member
Subcommittee on Federalism and the Census
Hearing on Intercensal Estimates

September 6, 2006

Thank you, Chairman Turner, and welcome to all of our witnesses. I am glad the Chairman scheduled this hearing on intercensal estimates. These estimates are vitally important since they are used to calculate how the federal government will distribute $280 billion dollars in grants to state and local governments across the nation – everything from Medicaid and Social Services Block Grants to Title I funding for education.

The Bureau of Labor statistics and other federal statistical agencies also use these estimates when calculating other important measures of society, including the unemployment rate, and per capita personal income.

The production of intercensal estimates is a collaborative effort between the Census Bureau and state and local governments organized through the Federal State Cooperative Program for Population Estimates.

Cooperation of the states and local governments is essential since it is administrative records such as births, deaths, housing permits, etc, which the Bureau principally relies on to produce the estimates.

If a state or local government disagrees with the Bureau's estimate there is a challenge process through which it can have the estimates adjusted. My own home town of St Louis engaged in this process in 2004 and its population estimate was adjusted upward by 8000 as a result.

As we will hear from our second panel, the challenge process is not with out problems. It takes a lot of time and work and the Bureau is not always as forthcoming with information as it might be. We will also hear suggestions on ways to improve the methodology for creating the estimates.

I look forward to hearing the details on the suggestions for improving intercensal estimates, and would urge to Bureau to keep an open mind on these issues.

Thank you Mr. Chairman.

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UNITED STATES DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. Census Bureau
Washington, DC 20233-0001
OFFICE OF THE DIRECTOR

OCT 23 2006

The Honorable Michael R. Turner, Chairman
Subcommittee on Federalism and the Census
Committee on Government Reform
U.S. House of Representatives
Washington, DC 20515-6143

Dear Mr. Chairman:

In your letter of September 8, 2006, you provided additional questions from the House Government Reform Subcommittee on Federalism and the Census following the September 6, 2006 hearing on intercensal population estimates. Enclosed are the Census Bureau's responses to your questions.

If you need further information, please have a member of your staff contact Mr. Jim Hayes in our Congressional Affairs Office at (301) 763-6100.

Sincerely,

Charles Louis Kincannon
Director

Enclosure

QUESTIONS FOR THE RECORD SUBMITTED BY
CHAIRMAN MICHAEL R. TURNER

1. **Having held the recent research conferences on immigration and methodology, what are the Census Bureau's specific plans to work with state partners and data users to design and implement improvements to the intercensal population estimates program?**

   The recent conferences were attended by a wide variety of population estimate users, including representatives from federal, state, and local governments; academia; and the private sector. All contributed their expertise and provided valuable insights about the population estimates program. Many users indicated that the U.S. Census Bureau should examine new approaches and embrace alternative or multiple methods of generating estimates. As a result, together with our state partners in the Federal State Cooperative Program for Population Estimates (FSCPE), we will research and develop alternative methodologies and produce alternative sets of population estimates for evaluation. We will continue to work on enhancements to the current method to include improved estimates of domestic migration. These improvements include replacing the returns-based use of Internal Revenue Service (IRS) data with a person-based use of IRS data and replacing the use of aggregate Medicare data with individual records. We will also research enhancements to the housing unit approach, including the use of data from the American Community Survey (ACS) to update estimates of occupancy and persons per household. The work on these enhancements will be done jointly with members of the FSCPE and other academic members, some of whom participated in the September 6 hearing. We will also be meeting with FSCPE members in states that produce their own population estimates to assess their methodologies, identify their unique data sets and evaluate their estimate results. We will use the results of this work and these evaluations to develop the production plan for the intercensal estimates program.

2. **Congress continues to fund the MAF/TIGER Enhancement Program. Can this improved tool be used to improve intercensal population estimates?**

   The MAF/TIGER Enhancement Program is primarily designed to improve the accuracy of the TIGER database. While this does not directly relate to the population estimates, the completeness and quality of the MAF will be used to supplement the estimates of housing units used in the population estimates program. With the enhancements to the MAF, we are now comparing counts from the enhanced MAF to the independent estimates of housing units to identify the places and counties where the housing unit estimates may be deficient.

3. Can the American Community Survey be used to improve intercensal population estimates?

Yes. Data on the foreign-born population from the ACS are currently used to estimate the annual level of international migration that is an input item to the intercensal estimates program. With full implementation of the ACS, we will explore using data on occupancy rates and persons per household to address some of the limitations of the current housing unit method used in the population estimates program. We also plan to use the data from the question on residence one year ago from the ACS to improve domestic migration included in the population estimates component of change method.

4. Since fiscal year 2003, the Bureau has received $3 million annually to improve intercensal estimates of migration and immigration. What improvements have been made with these funds?

Numerous improvements and enhancements have been made to intercensal estimates of migration and immigration. In particular:

- We have refined the method of estimating annual net foreign-born migration to the United States by improving our data source and implementing methodological changes that decrease the impact of annual fluctuations in the data.

- We have funded contract work that has included research on a method of estimating annual emigration from the United States. This research has yielded annual emigration rates that we will continue to evaluate in concert with a year-of-entry-based or residence-one-year-ago-based estimate of immigration to the United States.

- We have improved the way we process the annual estimates of net international migration.

As part of our effort to improve data on international migration, the Census Bureau sponsored a conference on "Immigration Statistics: Methodology and Data Quality," which has been an important and ongoing resource in focusing our immigration work.

We are exploring the use of the ACS to construct net international migration estimates (testing three different methods), evaluating the ability of the ACS to capture data on the foreign-born population, and potentially using the ACS to "distribute" international migrants to counties.

5. **Per your August 14, 2006, letter to me, the Census Bureau's intercensal population estimates for Washington, D.C. are developed based on the component of change method. Dr. Phillips testified on September 6, 2006 that Washington, D.C.'s successful challenge to the Bureau's 2005 intercensal population estimates was based on the housing unit method. Does the Census Bureau plan to produce 2006 population estimates for Washington, D.C. based on the component of change method or based on the housing unit method?**

   The revised July 1, 2005 population estimate for the District of Columbia resulting from the challenge process will become the basis for the July 1, 2006 estimate, with change measurement using the component method. Many users and stakeholders have indicated we should examine new approaches and embrace alternative or multiple methods to prepare the annual population estimates, such as variants of the current housing unit method. Working in collaboration with our state partners, including those in the District of Columbia, we will address some of the limitations of the current housing unit method and collect the necessary data to develop alternative estimates that will be compared to those based on the component method. Until we make a decision about the best approach to use for producing the estimates, we will also continue to work closely with our partners in the District of Columbia to review and update the information used in the component of change method.

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